INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
e make Indiana a cleaner, healthier place to live.

Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

(317) 232-8603
(800) 451-6027
www.state.in.us/idem

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY and Gary Department of Environmental Affairs

SCA Tissue North America, LLC
240 Waite Street
Gary, Indiana 46404

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F089-14760-00106	
Issued by: Original signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: December 13, 2002 Expiration Date: December 13, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) Gary Department of Environmental Affairs. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary secondary paper manufacturing plant.

Authorized individual:	General Manager
Source Address:	240 Waite Street, Gary, Indiana 46404
Mailing Address:	240 Waite Street, Gary, Indiana 46404
General Source Phone:	219-882-1640
SIC Code:	2621
County Location:	Lake County
Source Location Status:	Nonattainment for PM_{10}, Ozone, and SO_2 Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD or Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 source categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) natural gas-fired boiler, identified as unit ID-001, with a maximum rated capacity of 72.7 MMBTU per hour, constructed in 1968, exhausting to stack ID-001.

(b) One (1) secondary paper manufacturing operation with a maximum production capacity of 45,625 tons per year (machine dried tons), constructed in 1968, including the following miscellaneous equipment for pulping and paper machining:

(1) Wastepaper and bale handling;

(2) Wet end paper machine handling;

(3) Paper machine vacuum pumps;

(3) Yankee Dryer and After Dryer Exhaust (stack ID-002 and stack ID-003);.

(4) Dry end pulper;

(5) Pulp mill pulpers and washers;

(6) Paper machine processing equipment;

(7) Headbox discharge;

(8) Vacuum systems; and

(9) Fan Pump Silo.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) The following equipment not related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and six (6) welding stations.

(b) Cleaners and solvents characterized as follows:

(1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38E C (100EF) or;

(2) Having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(c) Natural gas-fired combustion heaters (Unit ID-002 through Unit ID-007) having a maximum heat input equal to or less than ten million (10,000,000) Btu per hour.

(1) Unit ID-002 through Unit ID-005; 300,000 Btu/hr (each)
(2) Unit ID-006; 400,000 Btu/hr
(3) Unit ID-007; 75,000 Btu/hr

(d) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(e) Operations using aqueous solutions containing less than 1% by weight of VOC's, excluding HAPs.

(f) Paved and unpaved roads and parking lots with public access.

(g) On-site fire and emergency response training approved by the department.

(h) Stationary fire pumps.

(i) Emission units with PM and PM10 emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) paper machine additive storage tank, identified as Unit ID-008, installed in 2000, having a maximum storage capacity of 1000 gallons;

(2) One (1) paper machine additive storage tank, identified as Unit ID-009, installed in 1993, having a maximum storage capacity of 1000 gallons;

(3) One (1) paper machine additive storage tank, identified as Unit ID-010, installed in 1993, having a maximum storage capacity of 4,190 gallons; and

(4) Two (2) diesel fuel oil storage tanks, identified as Unit ID-012 and Unit ID-013, installed in 1995, each having a storage capacity of 300 gallons.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

(a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM Gary Department of Environmental Affairs, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

(b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by Gary Department of Environmental Affairs.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs

504 North Broadway, Suite 1012
Gary, Indiana 46402

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ and Gary Department of Environmental Affairs within a reasonable time, any information that IDEM, OAQ and Gary Department of Environmental Affairs may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ and Gary Department of Environmental Affairs copies of records required to be kept by this permit.

(c) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ and Gary Department of Environmental Affairs may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:

(1) Enforcement action;

(2) Permit termination, revocation and reissuance, or modification; and

(3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, Gary Department of Environmental Affairs on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts as specified in Sections D of this permit, IDEM, OAQ and Gary Department of Environmental Affairs may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

The PMP extension notification does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ and Gary Department of Environmental Affairs upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and Gary Department of Environmental Affairs. IDEM, OAQ and Gary Department of Environmental Affairs may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Gary Department of Environmental Affairs makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Gary Department of Environmental Affairs within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and Gary Department of Environmental Affairs, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Gary Department of Environmental Affairs
Telephone No.: 219-882-3007
Facsimile No.: 219-882-3012

Northwest Regional Office
Telephone No.: 1-888-209-8892
Telephone No.: 219-881-6712
Facsimile No.: 219-881-6745

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ and Gary Department of Environmental Affairs may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ and Gary Department of Environmental Affairs, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or Gary Department of Environmental Affairs determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ or Gary Department of Environmental Affairs to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ Gary Department of Environmental Affairs, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ or Gary Department of Environmental Affairs, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and Gary Department of Environmental Affairs and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-

1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and Gary Department of Environmental Affairs on or before the date it is due.

(2) If IDEM, OAQ and Gary Department of Environmental Affairs upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ Gary Department of Environmental Affairs takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and Gary Department of Environmental Affairs any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-

15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and Gary Department of Environmental Affairs, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ and Gary Department of Environmental Affairs U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit

responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4320 (ask for OAQ, I/M & Billing determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);

(2) The potential to emit any regulated pollutant from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;

(3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-3 (Emission Offset), potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Fugitive Dust Emissions [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted by December 15, 1995.

C.8 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality

100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and Gary Department of Environmental Affairs not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ and Gary Department of Environmental Affairs, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1.11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.12 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

within ninety (90) days from the date of issuance of this permit.

The ERP does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ and Gary Department of Environmental Affairs, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ and Gary Department of Environmental Affairs, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall constitute a violation of the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2–8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Emission Statement [326 IAC 2-6] [326 IAC 2-8-4(3)]

(a) The Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. This statement must be received in accordance with the compliance schedule specified in 326 IAC 2-6-3 and must comply with the minimum requirements specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8). The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

The emission statement does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and Gary Department of Environmental Affairs on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or Gary Department of Environmental Affairs makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or Gary Department of Environmental Affairs within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

Gary Department of Environmental Affairs
504 North Broadway, Suite 1012
Gary, Indiana 46402

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ Gary Department of Environmental Affairs on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.

Sratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156

(b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

Contingency Measures

C.21 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

Upon notification from OAQ, that the source has likely to have caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM_{10}, the source shall implement any reduction measures required by 326 IAC 6-1-11.2 within one hundred eighty (180) days of the initial notification.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Boilers

(a) One (1) natural gas-fired boiler, identified as unit ID-001, with a maximum rated capacity of 72.7 MMBTU per hour, constructed in 1968, exhausting to stack ID-001.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-2]

Pursuant to 326 IAC 6-2-2 (a) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1(b)), boiler ID-001, shall be limited to 0.44 pounds per MMBtu heat input.

This limitation was calculated using the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where Pt = Pounds of particulate matter emitted per million Btu heat input; and
Q = Total source maximum operating capacity in MMBtu per hour = 72 MMBtu/hr

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.2 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain the following records:

(1) Monthly fuel records.

(2) A certification signed by the owner or operator that the records of the fuel usage represent all of the fuel combusted during the period. The natural gas fired boiler certification does not require the certification of the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.3 Reporting Requirements

(a) A semi-annual natural gas fired boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1-1(1).

(b) The Permittee shall certify, on the form provided, that natural gas was fired in the boiler at all times during each semi-annual period. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during each semi-annual period.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Secondary Paper Manufacturing

(b) One (1) secondary paper manufacturing operation with a maximum production capacity of 45,625 tons per year (machine dried tons), constructed in 1968, including the following miscellaneous equipment for pulping and paper machining:

(1) Wastepaper and bale handling;

(2) Wet end paper machine handling;

(3) Paper machine vacuum pumps;

(4) Yankee Dryer and After Dryer Exhaust (stack ID-002 and stack ID-003);.

(5) Dry end pulper;

(6) Pulp mill pulpers and washers;

(7) Paper machine processing equipment;

(8) Headbox discharge;

(9) Vacuum systems; and

(10) Fan Pump Silo.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 2-8] [326 IAC 8-7]

(a) The usage of VOC in the secondary paper manufacturing operation shall be less than 13.6 tons per 12 consecutive month period with compliance determined at the end of each month. This is equivalent to less than 15.4 tons per year VOC emissions from the source. Compliance with this limit will render 326 IAC 2-7 not applicable.

(b) Compliance with the above limit will also ensure compliance with 326 IAC 8-7. This rule requires an 81 percent reduction of VOC emissions as provided in 326 IAC 8-7-3(2). Total source emissions of 15.4 tons per year is an 81% reduction from the year 1994 actuals of 81.1 tons per year.

D.2.2 Particulate Limitation [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable particulate emission rate from each Dryer (stack ID-002 and stack ID-003) exhaust of the secondary paper manufacturing operation shall each not exceed 12.4 pounds per hour when operating at a process weight rate of 10,400 pounds per hour (5.2 tons per hour)

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility.

Compliance Determination Requirements

D.2.4 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Conditions D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.2.5 VOC Emissions

Compliance with Condition D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the secondary paper manufacturing stack exhaust (stack ID-002 and stack ID-003) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.7 Record Keeping Requirements

(a) To document compliance with Conditions D.2.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to demonstrate compliance with the VOC limit established in Condition D.2.1.:

(1) The ~~amount and~~ VOC content of each chemical used in the secondary paper manufacturing process. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount of chemical used.

(2) The total VOC usage for each month.

(3) The weight of VOC emitted for each compliance period.

(b) The visible emission notations of each dryer stack exhaust (stack ID-002 and stack ID-003) once per shift during normal daylight operations.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities

(a) The following equipment not related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and six (6) welding stations.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(1) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(2) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and Gary Department of Environmental Affairs

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: SCA Tissue North America, LLC
Source Address: 240 Waite Street, Gary, Indiana 46404
Mailing Address: 240 Waite Street, Gary, Indiana 46404
FESOP No.: 089-14760-00106

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

9 Annual Compliance Certification Letter

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

and Gary Department of Environmental Affairs

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: SCA Tissue North America, LLC
Source Address: 240 Waite Street, Gary, Indiana 46404
Mailing Address: 240 Waite Street, Gary, Indiana 46404
FESOP No.: 089-14760-00106

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: SCA Tissue North America, LLC
Source Address: 240 Waite Street, Gary, Indiana 46404
Mailing Address: 240 Waite Street, Gary, Indiana 46404
FESOP No.: 089-14760-00106

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Report period
Beginning: _____
Ending: _____

Boiler Affected	Alternate Fuel	Days burning alternate fuel From	To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
and Gary Department of Environmental Affairs

FESOP Quarterly Report

Source Name: SCA Tissue North America, LLC
Source Address: 240 Waite Street, Gary, Indiana 46404
Mailing Address: 240 Waite Street, Gary, Indiana 46404
FESOP No.: F089-14760-00106
Facility: Secondary paper manufacturing operation
Parameter: VOC input
Limit: 13.6 tons per 12 consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: SCA Tissue North America, LLC
Source Address: 240 Waite Street, Gary, Indiana 46404
Mailing Address: 240 Waite Street, Gary, Indiana 46404
FESOP No.: 089-14760-00106

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".
9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.
9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Page 2 of 2

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

December 13, 2002

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document
for a Federally Enforceable State Operating Permit

Source Background and Description

Source Name:	SCA Tissue North America, LLC
Source Location:	240 Waite Street, Gary, Indiana 46404
County:	Lake County
SIC Code:	2621
Operation Permit No.:	F089-14760-00106
Permit Reviewer:	ERG/EH

On September 23, 2002 the Office of Air Quality (OAQ) had a notice published in the Post Tribune, Merrillville, Indiana and The Times, Munster, Indiana, stating that SCA Tissue North America had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a stationary secondary paper manufacturing plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. The Gary Division of Air Pollution Control changed their name to the Gary Department of Environmental Affairs. This name was changed throughout the permit.

2. Condition D.1.3(a) stated that the Permittee requires certification by the "authorized individual" and in D.1.3(b) refers to each quarter of the report. This is incorrect. The Permittee does not require the certification by the "authorized individual" and the reporting period is semiannual. Condition D.1.3 Reporting Requirements has been revised as follows:

D.1.3 Reporting Requirements

(a) A semi-annual natural gas fired boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does **not** require the certification by the "authorized individual" as defined by 326 IAC 2-1-1(1).

(b) The Permittee shall certify, on the form provided, that natural gas was fired in the boiler at all times during each ~~quarter~~ **semi-annual period**. Alternatively, the Permittee shall report the number of days during which an alternate fuel was burned during each ~~quarter~~ **semi-annual period**.

3. Condition D.2.4 Volatile Organic Compounds (VOC) and Condition D.2.5 VOC Emissions refer to D.1.1 instead of D.2.1. The following corrections were made:

D.2.4 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Conditions D.1.~~1~~**2** shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.2.5 VOC Emissions

Compliance with Condition D.1.~~1~~**2** shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

4. A general phone number is used because it is cumbersome to do a notice only change every time a contact person's phone number changes. "County Location" has been added and "County Status" has been deleted. "Source Location Status" is used to clarify when only portions of a county are non-attainment. The following change was made to section A.1:

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary secondary paper manufacturing plant.

Authorized individual:	General Manager
Source Address:	240 Waite Street, Gary, Indiana 46404
Mailing Address:	240 Waite Street, Gary, Indiana 46404
General Source Phone:	**219-882-1640**
SIC Code:	2621
County Location:	Lake County
Source Location Status:	Nonattainment for PM_{10}, Ozone, and SO_2
~~County Status:~~	Attainment for all other criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP)

5. The citation for the term of permit rule was added to Condition B.3 Permit Term. In order to avoid confusion for renewals as to what "original" date we are referring to the following change has been made:

B.3 Permit Term [326 IAC 2-7-5(2)] **[326 IAC 2-1.1-9.5]**

This permit is issued for a fixed term of five (5) years from the ~~original~~ **issuance** date **of this permit**, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

6. Since Condition B.8(c) Duty to Supplement and Provide Information already addresses confidentiality, the last sentence of (b) was revised to remove the statement about confidential information, and (c) was updated for clarity. Also, the condition was revised to change a rule reference. Subpart (c) references 326 IAC 17. This rule was repealed by the Air Pollution Control Board on January 26, 2000. The new rule reference has been added as follows:

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management

Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

~~Gary Division of Air Pollution Control~~ **Gary Department of Environmental Affairs**
504 North Broadway, Suite 1012
Gary, Indiana 46402

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall furnish to IDEM, OAQ and ~~Gary Air and Land Pollution Control~~ **Gary Department of Environmental Affairs** within a reasonable time, any information that IDEM, OAQ and ~~Gary Air and Land Pollution Control~~ **Gary Department of Environmental Affairs** may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ and ~~Gary Air and Land Pollution Control~~ **Gary Department of Environmental Affairs** copies of records required to be kept by this permit**.** ~~or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]~~

(c) **For information furnished by the Permittee to IDEM, OAQ,** the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.**1** When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

7. Condition B.10 Compliance with Permit Conditions was revised as follows:

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in ~~condition~~ **Section** B, Emergency Provisions.

8. Condition B.13 Preventive Maintenance Plan has been revised because it is not necessary to state twice that the PMP does not need to be certified. Since it is more appropriate to state in (c), it has been removed from (a).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

~~Gary Division of Air Pollution Control~~ **Gary Department of Environmental Affairs**
504 North Broadway, Suite 1012
Gary, Indiana 46402

The ~~PMP and the~~ PMP extension notification do**es** not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

9. The requirement to include emergencies in the Quarterly Deviation and Compliance Monitoring Report has been moved from Condition B.15 to Condition B.14. In Condition B.14 Emergency Provisions, the statement at the end of (b)(4) has been removed because this is repeated in (f).

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ and ~~Gary Air and Land Pollution Control~~ **Gary Department of**

Environmental Affairs, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section)
or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

~~Gary Air and Land Pollution Control~~ **Gary Department of Environmental Affairs**
Telephone No.: 219-882-3007
Facsimile No.: 219-882-3012

Northwest Regional Office
Telephone No.: 1-888-209-8892
Telephone No.: 219-881-6712
Facsimile No.: 219-881-6745

~~Failure to notify IDEM, OAQ, Gary Air and Land Pollution Control, and the Northwest Regional Office, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules.~~ [~~326 IAC 2-8-12(f)~~]

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

~~Gary Division of Air Pollution Control~~ **Gary Department of Environmental Affairs**
504 North Broadway, Suite 1012
Gary, Indiana 46402

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ and ~~Gary Air and Land Pollution Control~~ **Gary Department of Environmental Affairs** may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ and ~~Gary Air and Land Pollution Control~~ **Gary Department of Environmental Affairs**, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

10. The language in Condition B.15(c) has been revised and incorporated into Condition B.14 Emergency Provisions.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

~~Gary Division of Air Pollution Control~~ **Gary Department of Environmental Affairs**
504 North Broadway, Suite 1012
Gary, Indiana 46402

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

~~(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.~~

11. Condition B.18(b) Permit Amendment or Revision has been revised to replace "should" with "shall" .

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

~~Gary Division of Air Pollution Control~~ **Gary Department of Environmental Affairs**
504 North Broadway, Suite 1012
Gary, Indiana 46402

Any such application ~~should~~ **shall** be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

12. In order to be consistent with 326 IAC 2-8-15(a)(5), the rule citation has been revised in Condition B.19(a)(5). Condition B.19(b) has been removed because this is a Part 70 requirement that is not applicable to a FESOP.

1. . . .

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and Gary Air and Land Pollution Control, in the notices specified in 326 IAC 2-8-15(b)**(2)**, (c)(1), and (d).

(b) ~~The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:~~

~~(1) A brief description of the change within the source;~~

~~(2) The date on which the change will occur;~~

~~(3) Any change in emissions; and~~

~~(4) Any permit term or condition that is no longer applicable as a result of the change.~~

~~The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.~~

(**b**~~c~~) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(**c**~~d~~) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

13. Condition B.22(c) Transfer of Ownership or Operational Control rule citation has been corrected.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-~~11~~**10**(b)(3)]

14. 326 IAC 2-1.1-7 specifies that nonpayment may result in revocation of the permit. This is not specified in 326 IAC 2-8; therefore, this rule citation has been added to Condition B.23. Also, the section and phone number of who the Permittee can contact has been corrected in (c).

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] **[326 IAC 2-1.1-7]**

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-~~0425~~ **4320** (ask for OAQ, ~~Technical Support and Modeling Section~~ **I/M & Billing Section**), to determine the appropriate permit fee.

15. C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour has been added. All Section C conditions are renumbered.

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

1. Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

2. Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

16. Condition C.9(e) Asbestos Abatements Projects, formerly C.8, has been revised to correct the rule citation.

C.~~8~~**9** Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-~~4~~**1** emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

17. The following was added to Condition C.11 Compliance Requirements, formerly C.10, to state what OAQ does when stack testing, monitoring, or reporting is required to assure compliance with applicable requirements:

C.~~10~~**11** Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements **by issuing an order under 326 IAC 2-1.1-11.** Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

18. Condition C.16(e) Compliance Response Plan - Preparation, Implementation, Records, and Reports, formerly C.15, the rule citation has been corrected.

C.~~15~~**16** Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-8-4] [326 IAC 2-8-5]

(e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of ~~326 IAC 2-7-16~~ **326 IAC 2-8-12**(Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

19. Condition C.20(d) General Reporting Requirements, formerly C.19, has been revised to indicate all forms instead of just quarterly reports.

C.~~19~~**20** General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(d) Unless otherwise specified in this permit, ~~any quarterly~~ **all** report**s** required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. ~~The report does~~ **All reports do** require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

20. Conditions have been revised to express limits in terms of "...per twelve (12) month period with compliance determined at the end of each month". Conditions D.2.1 Volatile Organic Compounds (VOC) has been revised as follows:

D.2.1 D.2.1 Volatile Organic Compounds (VOC) [326 IAC 2-8] [326 IAC 8-7]

(a) The usage of VOC in the secondary paper manufacturing operation shall be less than 13.6 tons per 12 consecutive month period **with compliance determined at the end of each month**. This is equivalent to less than 15.4 tons per year VOC emissions from the source. Compliance with this limit will render 326 IAC 2-7 not applicable.

21. Previously, the terms "particulate" and "particulate matter" were both used in the 326 IAC 6-3, but revisions were made to the rule which became effective on June 12, 2002 that included using the term "particulate" is used consistently in 326 IAC 6-3.

D.2.2 Particulate ~~Matter~~ Limitation ~~(PM)~~ [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable ~~PM~~ **particulate** emission rate from each Dryer (stack ID-002 and stack ID-003) exhaust of the secondary paper manufacturing operation shall each not exceed 12.4 pounds per hour when operating at a process weight rate of 10,400 pounds per hour (5.2 tons per hour)

22. The language in Condition D.3.1 has been updated to incorporate the newest revisions to 326 IAC 6-3-2 and reflect that these revisions have not as of yet been incorporated in the State Implementation Plan.

~~D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]~~

~~Pursuant to 326 IAC 6-3-2 (c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour. Therefore, the welding operation shall not exceed 0.551 pounds per hour per unit, based on a maximum process weight of less than 100 pounds per hour per unit.~~

D.3.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

1. Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

2. Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

23. The first box on the Emergency Occurrence Report form was revised to include the word "working" in order to be consistent with 326 IAC 2-8-12(b)(5) and the Emergency Provision. The phrase "with compliance determined at the end of each month" was added to the FESOP Quarterly Report to clarify the limit. The first sentence of the Quarterly Deviation and Compliance Monitoring Report was deleted because it poses a conflict with the provisions that require an annual certification.

EMERGENCY OCCURRENCE REPORT

This form consists of 2 pages **Page 1 of 2**

9 This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two **working** (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

FESOP Quarterly Report

Source Name:	SCA Tissue North America, LLC
Source Address:	240 Waite Street, Gary, Indiana 46404
Mailing Address:	240 Waite Street, Gary, Indiana 46404
FESOP No.:	F089-14760-00106
Facility:	Secondary paper manufacturing operation
Parameter:	VOC input
Limit:	13.6 tons per 12 consecutive month period **with compliance determined at the end of each month.**

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Page 1 of 2

~~This report is an affirmation that the source has met all the requirements stated in this permit.~~ This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

December 13, 2002

Indiana Department of Environmental Management
Office of Air Quality
and Gary Air and Land Pollution Control

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	SCA Tissue North America, LLC
Source Location:	240 Waite Street, Gary, Indiana 46404
County:	Lake County
SIC Code:	2621
Operation Permit No.:	F089-14760-00106
Permit Reviewer:	ERG/EH

The Office of Air Quality (OAQ) has reviewed a FESOP application from SCA Tissue North America, LLC relating to the operation of a secondary paper manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) One (1) natural gas-fired boiler, identified as Unit ID-001, with a maximum capacity of 72.7 MMBtu/hr, constructed in 1968, and exhausting to stack ID-001.

(b) One (1) secondary paper manufacturing operation with a maximum production capacity of 45,625 tons per year (machine dried tons), constructed in 1968, including the following miscellaneous equipment for pulping and paper machining:

(1) Wastepaper and bale handling;

(2) Wet end paper machine handling;

(3) Paper machine vacuum pumps;

(3) Yankee Dryer and After Dryer Exhaust (stack ID-002 and stack ID-003);.

(4) Dry end pulper;

(5) Pulp mill pulpers and washers;

(6) Paper machine processing equipment;

(7) Headbox discharge;

(8) Vacuum systems; and

(9) Fan Pump Silo.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval

There are no new facilities being proposed during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) The following equipment not related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, and six (6) welding stations.

(b) Cleaners and solvents characterized as follows:

(1) Having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100E) or;

(2) Having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

(c) Natural gas-fired combustion heaters (Unit ID-002 through Unit ID-007) having a maximum heat input equal to or less than ten million (10,000,000) Btu per hour.

(1) Unit ID-002 through Unit ID-005; 300,000 Btu/hr (each)
(2) Unit ID-006; 400,000 Btu/hr
(3) Unit ID-007; 75,000 Btu/hr

(d) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(e) Operations using aqueous solutions containing less than 1% by weight of VOC's, excluding HAPs.

(f) Paved and unpaved roads and parking lots with public access.

(g) On-site fire and emergency response training approved by the department.

(h) Stationary fire pumps.

(i) Emission units with PM and PM10 emissions less than five (5) tons per year, SO_2, NOx, and VOC emissions less than ten (10) tons per year, CO emissions less than twenty-five (25) tons per year, lead emissions less than two-tenths (0.2) tons per year, single HAP emissions less than one (1) ton per year, and combination of HAPs emissions less than two and a half (2.5) tons per year:

(1) One (1) paper machine additive storage tank, identified as Unit ID-008, installed in 2000, having a maximum storage capacity of 1000 gallons;

(2) One (1) paper machine additive storage tank, identified as Unit ID-009, installed in 1993, having a maximum storage capacity of 1000 gallons;

(3) One (1) paper machine additive storage tank, identified as Unit ID-010, installed in 1993, having a maximum storage capacity of 4,190 gallons; and

(4) Two (2) diesel fuel oil storage tanks, identified as Unit ID-012 and Unit ID-013, installed in 1995, each having a storage capacity of 300 gallons.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) City of Gary Operating Permit, issued on May 17, 2001 for the natural gas boiler (Unit ID 001)

All conditions from previous approvals were incorporated into this FESOP.

Enforcement Issue

(a) The source should have applied for a Part 70 Permit or received a FESOP in 1996 but did not until they realized that the actual emissions of VOC exceeded the twenty-five (25) tons per year major source VOC emission level for Lake County during the following years: 1994, 1995, 1998, 1999, and 2000 (data not available for 1996 and 1997). Original annual emission inventories submitted to IDEM during those years identified the facilities actual emissions as less than twenty-five (25) tons per year.

A plant-wide reevaluation of emissions was performed in 2000 by SCA Tissue who purchased the plant from Georgia Pacific in 2001 and consequently were the owners from 2001 to present. The corrected emission inventory calculations indicated the following actual emissions for the five years: 1994 = 81.1 tpy, 1995 = 75.6 tpy, 1998 = 31.9 tpy, 1999 = 47.4 tpy, and 2000 = 53.7 tpy.

Since notifying IDEM about this issue, SCA Tissue has permanently implemented lower VOC content chemicals in their secondary paper manufacturing plant process as of January 2001 to maintain potential to emit levels below the major emission level of 25 tons per year of VOC in Lake County.

(b) The source became subject to 326 IAC 8-7 (Lake County VOC Reduction Requirements) in 1994 when the actual VOC emissions were 81.1 tons. Emission reduction measures were not made until 2001 when chemicals containing VOC were replaced with water-based chemicals. This resulted in an emissions reduction from the 1994 actual VOC emissions of 81%. This permit contains a limit of 15.4 tons per year of VOC use which will bring the emissions reductions to 81% in order to comply with the rule.

For the entire secondary manufacturing process the majority of emissions are fugitive and an overall VOC reduction using control technology is not feasible or economical to the source. Therefore, 326 IAC 8-7-3(2) is the most appropriate choice for the source to reduce VOC emissions. 326 IAC 8-7-3(2) requires an overall reduction of at least eighty-one percent (81%) from baseline actual emissions (1994 for SCA Tissue).

(c) IDEM is reviewing this matter and will take appropriate action. The proposed permit is intended to satisfy the requirements of 326 IAC 2-8.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on August 16, 2001. Additional information was received on December 14, 2001, January 18, 2002, April 29, 2002, July 21, 2002, and August 13, 2002.

There was no notice of completeness letter mailed to the source.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document, pages 1 through 17.

Potential To Emit for the Source

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)*
PM	19.3
PM-10	19.3
SO_2	0.2
VOC	24.9
CO	26.8
NO_x	31.8

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
HAP's (VOC)	9.45
HAP's (Metals)	0.002
TOTAL*	10.17

* Total HAP's include carbon disulfide, which is a HAP, but not a VOC or metal.

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is less than 25 tons per year in Lake County. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) Past history. The source was constructed in 1968. The major source level for VOC changed from 100 tpy to 25 tpy in December 1993. The source had actual emissions at or greater than 25 tpy VOC rate for the years 1994, 1995, and 1998 through 2000 (data not available for 1996 and 1997).

(c) Because the PTE of VOC is very close to the major source level of 25 tons per year and at the source's request, a FESOP is being prepared as provided by 326 IAC 2-8-2(b).

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Federally Enforceable State Operating Permit.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Boiler	2.42	2.42	0.2	1.75	26.8	31.8	-
Secondary Paper Manufacturing	16.88	16.88	-	13.60	-	-	10.2
Total Emissions	19.3	19.3	0.2	15.4	26.8	31.8	10.2

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	Moderate Non-attainment
SO_2	Primary Non-attainment
NO_2	Attainment
Ozone	Severe Non-attainment
CO	Maintenance Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as nonattainment for ozone.

(b) Lake County has been classified as attainment for carbon monoxide and Lead. Therefore, these requirements were reviewed pursuant to the requirements for prevention of significant deterioration (PSD), 386 IAC 2-2 and 40 CFR 52.21.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) The natural gas boiler (Unit ID-001) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60, Subpart Dc), because the boiler was constructed in 1968 before the 1989 applicability date of this subpart.

(c) The storage tanks (Unit ID-008, Unit ID-009, Unit ID-010, Unit ID-012, and Unit ID-013) are not subject to the requirements of the New Source Performance Standards, 326 IAC 12, (40 CFR 60, Subpart Kb) because each tank is less than 10,569 gallons.

(d) The secondary paper manufacturing plant is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart S due to the potential to emit of hazardous air pollutants being less than major source levels.

(e) The cooling tower is not subject to the National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers (40 CFR 63, Subpart Q) because this facility is not a major source and there is no chromium in their water treatment program.

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offsets)

The source was constructed in 1968. This would have pre-dated the requirement to obtain a construction permit. It is uncertain what the potential to emit was at the time the source was constructed. At the time of construction, it was probably not a major source for VOC emissions.

The only change to the source since 1968 was the construction of several additive tanks. The largest tank had a capacity of 4,190 gallons. The other tanks' capacities were 1,000 gallons or less. The addition of the tanks would have been exempt from permitting. Therefore, even if the source were a major source at construction, the addition of these tanks would not have triggered the emission offset rules.

Based upon the source's current PTE, the source is a minor source.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year for Lake County of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 2-8 (FESOP)

The PTE of VOC from this source was greater than 25 tons per year in 1994, 1995, 1998, 1999 and 2000 (data not available for 1996 and 1997). In 2001, the source changed the materials they use, therefore their current PTE for VOC is 24.9 tons per year. Because this is very close to the major source level of 25 tons per year and at the source's request, a FESOP was prepared limiting the VOC input to the secondary paper manufacturing operation to 14.4 tons per 12-consecutive month period. This is equivalent to limiting the source to less than 15.4 tons per year. Therefore, 326 IAC 2-7 does not apply. The source is being limited to a level much less than 25 tons per year in order to meet the requirements of 326 IAC 8-7. See discussion for this rule.

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of secondary paper manufacturing plant will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of a combination of HAPs. Also, the source was constructed in 1968 before the applicability date of this rule, July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations)

This source is not subject to 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations) because the potential to emit of PM is less than one hundred (100) tons per year and the actuals are less than ten (10) tons per year.

326 IAC 6-1-2 (Particulate Emission Limitations; Fuel Combustion Steam Generators)

This rule does not apply to the natural gas boiler because SCA Tissue is not listed as a specific applicable source as required by 6-1-1(a)(1).

326 IAC 6-1-10 (Lake County PM_{10} Emission Requirements)

This source is not subject to 326 IAC 6-1-10 (Lake County PM_{10} Emission Requirements) because it is not a source that is specifically listed in this rule.

326 IAC 6-1-11.1 (Lake County Particulate Matter Control Requirements)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

(a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).

(b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

(c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).

(d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.

(e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.

(f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.

(g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).

(h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.

(i) The PM_{10} emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

(j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).

(k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan, submitted by December 15, 1995.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

The source is subject to 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures) because it has potential emissions of PM_{10} greater than ten (10) tons per year. Upon notification from OAQ, that the source has likely to have caused or contributed to an exceedance of the twenty-four (24) hour ambient air quality standard for PM_{10}, the source shall implement any reduction measures required by 326 IAC 6-1-11.2 within one hundred eighty (180) days of the initial notification.

326 IAC 6-2-2 (Particulate Emissions for indirect heating facilities located in Lake County)

Pursuant to 326 IAC 6-2-2 (a) (Particulate emission limitations for sources of indirect heating emission limitations for facilities specified in 326 IAC 6-2-1(a)) shall be limited to 0.44 pounds per Btu heat input for boiler ID-001.

This limitation was calculated using the following equation:

$$Pt = \frac{0.87}{Q^{0.16}}$$

Where Pt = Pounds of particulate matter emitted per million Btu heat input; and
Q = Total source maximum operating capacity in Btu per hour = 72.7

326 IAC 6-3-2 (Particulate)

Pursuant to 326 IAC 6-3-2, the allowable PM emission rate from each Dryer stack exhaust (stack ID-002 and stack ID-003) of the secondary paper manufacturing operation shall each not exceed 12.4 pounds per hour when operating at a process weight rated of 1040 pounds per hour (5.2 tons per hour).

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

326 IAC 7-4-1.1 (Lake County Sulfur Dioxide Emission Limitations)

326 IAC 7-4-1.1 is not applicable to this source because the potential to emit for fuel combustion is not greater than twenty-five (25) tons per year or ten (10) pounds per hour of sulfur dioxide (326 IAC 7-1.1-1).

326 IAC 8-1-6 (Volatile Organic Compounds)

This rule does not apply because most equipment was installed before 1980 and those equipment (5 tanks) not installed before 1980 each have potential to emit of VOC of less than 25 tons per year.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

The two (2) diesel storage tanks (Unit ID-012 and Unit ID-013) are not subject to 326 IAC 8-4-3 because the tank sizes are less than 39,000 gallons.

326 IAC 8-6 (Organic Solvent Emission Limitations)

This source is not subject to 326 IAC 8-6 because it was constructed in 1968 before the applicability date for this rule of October 7, 1974.

326 IAC 8-7 (Lake County VOC Reduction Requirements)

The source is subject to 326 IAC 8-7 because it is in Lake County and the source exceeded twenty-five (25) tons per year prior to 2001. Under 326 IAC 8-1-1(a), once a facility becomes subject to a rule within Article 8, it is always subject to it. In order for the source to comply with this rule, the secondary paper manufacturing operation is limited to 13.6 tons per year of VOC usage. This will limit the entire source to less than 15.4 tons per year. Emissions of 15.4 tons per year of VOCs represents an 81% reduction in emissions from 1994 actual emissions; thereby complying with 326 IAC 8-7. See discussion under *Enforcement Issues* for further details.

Testing Requirements

This source has a clear method of compliance monitoring to demonstrate its VOC and HAP levels are below major source levels using mass balance. The source will keep records of the throughput of each chemical used annually in the secondary paper manufacturing plant. Therefore, testing is not required.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

1. The secondary paper manufacturing operation (stack ID-002 and stack ID-003) has applicable compliance monitoring conditions as specified below:

   (a) Visible emissions notations of the stack ID-002 and stack ID-003 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated

continuously “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the emission limit in Condition D.2.1 is the only thing keeping the unit out of an applicable requirement (326 IAc 8-7-3(1)).

Conclusion

The operation of this secondary manufacturing paper plant shall be subject to the conditions of the attached proposed FESOP No.: F089-14760-00106.

Appendix A: Emission Calculations December 16, 2002

Company Name: SCA Tissue North America
Address City IN Zip: 240 Waite Street, Gary, IN 46404
CP: 089-147609
Plt ID: 089-00106
Date: 5/7/02

Maximum Raw Material Feed Rates and Product Discharge Rates

Maximum rated production of the plant is 125 machine dried tons (MDT). Mill may produce 100% Kraft paper or 100% white wastepaper, however, the total for both waste papers will not exceed the total of 45,625 MDT per year (125 MDT x 365 days/yr = 45,625).

- **Maximum rated raw material input as wastepaper (brown Kraft)-28,281 Oven-dried ton/yr**
- **Maximum rated raw material input as bales (white pulp)-24,011 Oven-dried ton/yr**
- **Maximum rated pulp mill fiber input – 48,160 air-dried ton/yr**

Four spreadsheet tables of information have been developed to provide all emission calculation results. These are identified below:

Table 1	***Potential-to-Emit Emission Rate Summary*-contains summary of all emission calculations for criteria and hazardous air pollutants performed in Tables 2, 3, and 4.**
Table 2	***Potential-to-Emit Emission Calculations for Criteria Pollutants*-contains emission factors and production rates used for all criteria pollutant emission calculations.**
Table 3	***Potential-to-Emit Emission Calculations for VOC-Containing Chemicals*-contains a listing of the chemicals used in the mill that contain volatile organic compounds, their VOC content and potential usage.**
Table 4	***Potential-to-Emit Emission Calculations for HAP's*-contains a listing of the emission factors and production rates used for all hazardous air pollutant emission calculations.**
Table 5	***Raw Material Input Data*-contains the raw material feed rates and maximum chemical usage data for the Mill, as well as the calculated potential VOC emissions for the various chemicals used. This data is used as a basis for the calculations performed in Tables 1-4.**

Details of how the emission calculations have been performed will start with:

TABLE 2-POTENTIAL-TO-EMIT CALCULATIONS FOR CRITERIA POLLUTANTS:

Particulate Emission Calculations:

(1) Fugitive dust generated from the handling of wastepaper and pulp-use Aggregate Handling equations from EPA Manual AP-42, Section 13.2.4:

Emission factor, lb particulate generated/ton material handled = E = k x 0.0032 x $(U/5)^{1.3}$ / $(M/2)^{1.4}$

Where:

k = particle size multiplier, dimensionless-assume = 0.35 for particle size < 10 um
U = mean wind speed, miles per hour-assume = 6.9 mph (conservative value)
M = moisture content, %-assume = 1% (very conservative)

E = 0.35 x 0.0032 x $(6.9/5)^{1.3}$ / $(1/2)^{1.4}$ = 0.0017/0.38 = 0.0045 lb/ton

PM_{10} emissions (wastepaper)= 0.0045 lb/ton x 28,280 ODT/yr = 127.3 lb/yr or 0.06 ton/yr

PM_{10} emissions (pulp)= 0.0045 lb/ton x 24,010 ODT/yr = 108.0 lb/yr or 0.05 ton/yr

(2) Fugitive dust generated by handling of wastepaper and pulp at wet end of paper machine-use information collected from testing conducted at similar SCA plant in Menasha, WI-results of testing indicated an emission factor of 0.18 lb PM/ton material handled:

Emissions = 0.18 lb/ton x 45,620 MDT/yr = 8,211.6 lb/yr or 4.11 ton/yr

(3) Fugitive dust generated by paper machine vacuum pumps-estimate of 0.0005 grains PM/ft^3 air handled, 50,000 acfm.

Emissions = 0.0005 grns/ft^3 x 1/7,000 grns/lb x 50,000 ft^3/min x 60 min/hr = 0.21 lb/hr or 0.94 ton/yr

(4) Dust generated by processing of wastepaper and pulp-Yankee Dryer exhaust-estimate of 0.001 grains PM/ft^3 air handled, 50,000 ft^3/min.

Emissions = 0.001 grns/ft^3 x 1/7,000 grns/lb x 50,000 ft^3/min x 60 min/hr = 0.43 lb/hr or 1.88 ton/yr

(5) Fugitive dust generated by dry end pulper and dust collection system-estimate of 0.002 grains PM/ ft^3 air handled, 100,000 ft^3/min.

Emissions = 0.002 grns/ft^3 x 1/7,000 grns/lb x 100,000 ft^3/min x 60 min/hr = 1.71 lb/hr or 7.51 ton/yr

(6) Boiler-PM generated from combustion of natural gas. Total potential quantity of gas burned per year:

72.7 MM Btu/hr heat input (design rate) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 636.852 MM ft^3/yr

Emission factor from AP-42, Table 1.4-2 (2/98) = 7.6 lb PM/MM ft^3 gas burned

Emissions = 7.6 lb/MM ft^3 x 636.852 MM ft^3/yr /2,000 lb/ton = 2.42 ton/yr or 0.55 lb/hr

(7) Space Heaters- PM generated from combustion of natural gas. Total potential quantity of gas burned per year:

1.675 MM Btu/hr heat input (design rate for six heaters) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 14.673 MM ft^3/yr

Emission factor from AP-42, Table 1.4-2 (2/98) = 7.6 lb PM/MM ft^3 gas burned
Emissions = 7.6 lb/MM ft^3 x 14.673 MM ft^3/yr /2,000 lb/ton = 0.06 ton/yr or 0.014 lb/hr

(8) Unpaved Roads-fugitive dust generated by operation of vehicles within plant boundaries-use AP-42 Section 13.2.2 (9/98):

Emission factor, lb PM per vehicle mile traveled (lb/VMT), = $k \times (S/12)^a \times (W/3)^b / (M/0.2)^c$
where:
k, a, b, c are empirical constants-for PM_{10}, k = 2.6, a=0.8, b=0.4, c=0.3
s = surface material silt content, %-assume = 6.4%
W = mean vehicle weight, tons-assume = 30 tons
M = mean surface material moisture content, %-assume = 10.0 %

$E = 2.6 \times (6.4/12)^{0.8} \times (30/3)^{0.4} / (10/0.2)^{0.3} = 2.6 \times 0.60 \times 2.51 / 3.23 = 1.21$ lb/VMT

Emissions = 1.21 lb/VMT x 571 VMT/yr = 690.9 lb/yr or 0.35 ton/yr

(9) Paved Roads- fugitive dust generated by operation of vehicles within plant boundaries-use AP-42 Section 13.2.1 (10/97):

Emission factor, lb PM per vehicle mile traveled (lb/VMT), = $k \times (sL/2)^{0.65} \times (W/3)^{1.5}$
where:
k = base emission factor for PM_{10}, lb/VMT-assume = 0.016
sL = road surface silt loading, g/m2-assume = 12.3
W = mean vehicle weight, tons-assume = 30 tons

$E = 0.016 \times (12.3/2)^{0.65} \times (30/3)^{1.5} = 0.016 \times 3.26 \times 31.6 = 1.65$ lb/VMT

Emissions = 1.65 lb/VMT x 2,282 VMT/yr = 3,764 lb/yr or 1.88 ton/yr

(10) Welding-particulate emissions generated by welding operations at mill. Use AP-42 Section 12.19, Tables 12.19-1 through 12.19-2.

Emission factor for PM_{10}-use average of 25 lb/1,000 lbs of welding electrodes (Table 12.19-1)
Emission factor for lead-use average of 0.162 lb/1,000 lbs of welding electrodes (Table 12.19-2)

Assume maximum of 6 electrodes used/hr, 1.0 lb/electrode, 10 times per year

Lb/hr for PM10 emissions = 6 electrodes/hr x 1.0 lb/electrode x 25 lb/1,000 lb electrodes = 0.15 lb/hr

Ton/yr = 0.15 lb/hr x 10 events/yr x 1 ton/2,000 lb = 0.00075 ton/yr

Sulfur Dioxide Emission Calculations:

(1) Boiler-SO_2 generated from combustion of natural gas. Total potential quantity of gas burned per year:

72.7 MM Btu/hr heat input (design rate) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 636.852 MM ft^3/yr

Emission factor from AP-42, Table 1.4-2 (2/98) = 0.6 lb SO_2/MM ft^3 gas burned

Emissions = 0.6 lb/MM ft^3 x 636.852 MM ft^3/yr /2,000 lb/ton = 0.19 ton/yr or 0.04 lb/hr

(2) Space Heaters- SO_2 generated from combustion of natural gas. Total potential quantity of gas burned per year:

1.675 MM Btu/hr heat input (design rate for six heaters) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 14.673 MM ft^3/yr

Emission factor from AP-42, Table 1.4-2 (2/98) = 0.6 lb SO_2/MM ft^3 gas burned

Emissions = 0.6 lb/MM ft^3 x 14.673 MM ft^3/yr /2,000 lb/ton = 0.0044 ton/yr or 0.001 lb/hr

Sulfuric Acid Mist Emission Calculations:

(1) Boiler-H_2SO_4 generated from combustion of natural gas. Total potential quantity of gas burned per year:

72.7 MM Btu/hr heat input (design rate) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 636.852 MM ft^3/yr

Emission factor from NCASI = 1% of SO_2 generated
Emissions = 0.01 x 0.19 ton SO_2/yr = 0.0019 ton/yr or 0.00043 lb/hr

(2) Space Heaters- H_2SO_4 generated from combustion of natural gas. Total potential quantity of gas burned per year:

1.675 MM Btu/hr heat input (design rate for six heaters) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 14.673 MM ft^3/yr

Emission factor from NCASI = 1% of SO_2 generated

Emissions = 0.01 x 0.0044 ton SO_2/yr = 0.000044 lb/hr or 0.00001 lb/hr

Nitrogen Oxide Emission Calculations:

(1) Boiler-NO_x generated from combustion of natural gas. Total potential quantity of gas burned per year:

72.7 MM Btu/hr heat input (design rate) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 636.852 MM ft^3/yr

Emission factor from AP-42, Table 1.4-1 (2/98) = 100 lb NO_x /MM ft^3 gas burned

Emissions = 100 lb/MM ft^3 x 636.852 MM ft^3/yr /2,000 lb/ton = 31.8 ton/yr or 7.27 lb/hr

(2) Space Heaters- NO_x generated from combustion of natural gas. Total potential quantity of gas burned per year:

1.675 MM Btu/hr heat input (design rate for six heaters) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 14.673 MM ft^3/yr

Emission factor from AP-42, Table 1.4-1 (2/98) = 100 lb NO_x /MM ft^3 gas burned

Emissions = 100 lb/MM ft^3 x 14.673 MM ft^3/yr /2,000 lb/ton = 0.73 ton/yr or 0.17 lb/hr

Carbon Monoxide Emission Calculations:

(1) Boiler-CO generated from combustion of natural gas. Total potential quantity of gas burned per year:

72.7 MM Btu/hr heat input (design rate) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 636.852 MM ft^3/yr

Emission factor from AP-42, Table 1.4-1 (2/98) = 84 lb CO /MM ft^3 gas burned

Emissions = 84 lb/MM ft^3 x 636.852 MM ft^3/yr /2,000 lb/ton = 26.7 ton/yr or 6.1 lb/hr

(2) Space Heaters- CO generated from combustion of natural gas. Total potential quantity of gas burned per year:

1.675 MM Btu/hr heat input (design rate for six heaters) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 14.673 MM ft^3/yr

Emission factor from AP-42, Table 1.4-1 (2/98) = 84 lb CO /MM ft^3 gas burned

Emissions = 84 lb/MM ft^3 x 14.673 MM ft^3/yr /2,000 lb/ton = 0.62 ton/yr or 0.14 lb/hr

Volatile Organic Compound Emission Calculations:

All VOCs contained within the chemicals used at the Mill are assumed to be emitted to the atmosphere. This is done by multiplying the VOC content (%) times the usage in pounds per year to obtain pounds of VOCs emitted per year. For the two diesel storage tanks, EPA's TANKS computer program, version 4.09 was used to estimate emissions.

(1) Boiler-VOC generated from combustion of natural gas. Total potential quantity of gas burned per year:

72.7 MM Btu/hr heat input (design rate) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 636.852 MM ft^3/yr

Emission factor from AP-42, Table 1.4-2 (2/98) = 5.5 lb VOC /MM ft^3 gas burned
Emissions = 5.5 lb/MM ft^3 x 636.852 MM ft^3/yr /2,000 lb/ton = 1.75 ton/yr or 0.40 lb/hr

(2) Space Heaters- VOC generated from combustion of natural gas. Total potential quantity of gas burned per year:

1.675 MM Btu/hr heat input (design rate for six heaters) / 1,000 Btu/ft^3 gas x 8,760 hr/yr = 14.673 MM ft^3/yr

Emission factor from AP-42, Table 1.4-2 (2/98) = 5.5 lb VOC /MM ft^3 gas burned

Emissions = 5.5 lb/MM ft^3 x 14.673 MM ft^3/yr /2,000 lb/ton = 0.04 ton/yr or 0.009 lb/hr

(3) Pulp Mill Chemicals (see Table 3 Emission Calculations)

(4) Pulp Mill Pulpers and Washers (hypochlorite)-(see Table 4 Emission Calculations)

(5) Pulp Mill fiber

Emission factor = 0.106 lb/ODT -see NCASI reference in Table 2
Emissions = 0.106 lb/ODT x 45,625 ODT/yr = 4,836.3 lb/yr or 2.4 ton/yr

(6) Paper Machine Chemicals-fugitive (see Table 3 Emission Calculations)

(7) Paper Machine Chemicals-stack (see Table 3 Emission Calculations)

(8) Headbox discharge

Emission factor = 0.0585 lb/ADTP -see NCASI reference in Table 2
Emissions = 0.0585 lb/ODT x 48,160 ADT/yr = 2,817.4 lb/yr or 1.4 ton/yr

(9) Fan pump silo

Emission factor = 0.003 lb/ADTP -see NCASI reference in Table 2
Emissions = 0.003 lb/ODT x 48,160 ADT/yr = 144.5 lb/yr or 0.072 ton/yr

(10) Vacuum systems

Emission factor = 0.0159 lb/ADTP -see NCASI reference in Table 2
Emissions = 0.0159 lb/ODT x 48,160 ADT/yr = 765.7 lb/yr or 0.38 ton/yr

(11) Yankee and After Dryers

Emission factor = 0.143 lb/ADTP -see NCASI reference in Table 2
Emissions = 0.143 lb/ODT x 48,160 ADT/yr = 6,886.9 lb/yr or 3.44 ton/yr

(12) Boiler Water Treatment Chemicals (see Table 3 Emission Calculations)

(13) Wastewater Treatment Facility Chemicals (see Table 3 Emission Calculations)

(14) Cooling Tower Treatment Chemicals (see Table 3 Emission Calculations)

(15) Parts Washer Solvent (Safety-Kleen) (see Table 3 Emission Calculations)

VOC Emissions from Chemical Storage Tanks:

There are five chemical storage tanks in use at the mill. These are listed below:

Tank # 1-AMRES LA12-2 (Unit ID-008)
Tank # 2-Prestige 8520 (Unit ID-009)
Tank # 3-Houghton 247 (Unit ID-010)
Tank # 4-Diesel Fuel Oil (Unit ID-012)
Tank # 5-Diesel Fuel Oil (Unit ID-013)

Tank numbers 1-3 contain paper machine additives for strengthening the product and allowing the product to easily be released from the paper machine. Tank numbers 4-5 contain diesel fuel which serve the mill's front-end loader and emergency fire water pump.

VOC emissions from Tank No's 1-3 have been calculated in the spreadsheet represented by Table 3. We have assumed in the spreadsheet that 100% of the VOC content has evaporated through its use.

VOC emissions from Tank No's 4-5 have been calculated separately as explained next:

To calculate diesel emissions, use EPA's TANKS computer program, version 4.09. Input data consists of annual usage, tank dimensions, tank physical characteristics data (color, condition, etc.), and selection of nearest airport (Chicago, Il). Results from TANKS indicate a VOC emission rate of 0.11 pounds per year for each tank. To determine the hourly emission rate, divide 0.11 by 8,760 hr/yr to obtain 0.000013 lb/hr. To obtain tons per year, divide 0.11 tons by 2,000 lb/ton to equal 0.000055 ton/yr.

TABLE 3-POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR VOC-CONTAINING CHEMICALS

This table contains a listing of the various chemicals used in the mill for the pulping process, paper making process (coatings and release agents), boiler water treatment chemicals, wastewater treatment plant chemicals, cooling tower treatment chemicals, and the maintenance shop parts washer solvent cleaning tank.

To calculate the VOC emissions from usage of each of the chemicals, the VOC content of each chemical is multiplied by its potential usage in pounds per year. The VOC content for each chemical listed on Table 3 comes either from the manufacturer's Material Safety Data Sheet (MSDS) or a written letter from the manufacturer which documents the VOC content. All of this documentation is maintained by the Environmental Coordinator at the mill.

Potential usage's for each chemical have been determined by using the usage for the 2001calendar year and multiplying this value times a factor equal to the potential production of paper in machine dried tons per year (45,625 MDT/yr) divided by the estimated production of paper for the 2001 calendar year (35,390 MDT/yr). This factor is equal to 45,625/35,390 = 1.29.

Examples of a few VOC emission calculations are shown below. All other calculations are similar in that they equal the potential usage times the VOC content.

> **VOC emissions for Amres LA12-2 wet strength resin = 0.15 % VOC content x 822,716 lbs/yr = 1,234 lb/yr or 0.62 tons/yr**
>
> **VOC emissions for Steamate NA2460 = 48.0 % VOC content x 1,644 lb/yr = 789 lb/yr or 0.39 tons/yr**

The mill may change the types and quantities of chemicals used throughout the year, however, the mill will assure that the total chemical usage's and their respective VOC content plus the VOC's from other sources in the mill will never exceed 24.9 tons per year on a rolling 12-month calendar basis. This will assure that the mill remains a synthetic minor source of VOC emissions.

The mill will maintain a rolling 12-month VOC inventory for the entire facility to ensure that the major source threshold of 25.0 tons per year of VOC's is never exceeded.

TABLE 4-POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAZARDOUS AIR POLLUTANTS (HAP's):

This table contains a listing of HAP emissions for the various processes operations plus the boiler and space heaters in the mill. HAP emissions are calculated by multiplying the appropriate production rate times an emission factor (which comes from either NCASI or AP-42). A summary of all HAP emission rates calculated from this table are contained in Table 1.

Examples of a few emission calculations are shown below. All other calculations are similar in that they equal the potential production rate times the appropriate emission factor (or in the case of the boiler and space heaters, multiply the maximum gas usage times the appropriate emission factor).

> **HAP emissions for acetaldehyde from fiber pulp = 0.00478 ODT/yr x 45,625 ODT/yr = 218.1 lb/yr or 0.11 ton/yr.**
>
> **HAP emissions for formaldehyde from Yankee Dryer = 0.011 lb/ADTP x 48,160 ADTP/yr = 529.8 lb/yr or 0.26 ton/yr.**
>
> **HAP emissions for arsenic from Boiler = 0.0002 lb/MM ft^3 x 636.852 MM ft^3/yr = 0.13 lb/yr or 0.000064 ton/yr or 0.000015 lb/hr.**

A summary of the total emission rates for each HAP compound is provided at the end of Table 4. As can be seen from the HAP summary, there are no individual HAP's with emission rates greater than 10.0 tons per year or any combination of HAP's with emission rates greater than 25.0 tons per year. The total potential HAP emission rate for the entire facility is equal to 10.2 tons per year. This HAP value is part of the overall VOC emission calculations and should not be added to the total VOC emission rates previously determined in Table 2.

TABLE 1-POTENTIAL-TO-EMIT EMISSION RATE SUMMARY, TONS PER YEAR

This table provides a summary of all potential-to-emit emission calculation results for the mill. All of the data entered in this table comes from Tables 2, 3, or 4. A summary of the Table 1 emission rates is presented below:

Pollutant	Potential-to-Emit Emission Rates, ton/yr	Major Source Threshold, ton/yr
PM/PM_{10}	19.3	100.0
SO_2	0.20	100.0
NO_x	32.6	100.0
CO	27.4	100.0
VOC	24.9	25.0
HAP's (VOC's)	9.45	25.0
HAP's (metals)	0.002	25.0
Total HAP's	10.2	25.0

(Total HAP's includes carbon disulfide which is a HAP, but not a VOC and not a metal)

The results of the information contained in Table 1 indicate that the mill is a minor source of pollution for all criteria and hazardous air pollutants. This is because the total VOC's from the mill are less than the major source threshold of 25.0 tons per year for Lake County, IN which is part of the Metropolitan Chicago Interstate Air Quality Control Region.

As can also be seen by the summary above, the mill does not emit more than 10.0 tons per year of any single hazardous air pollutant or 25.0 tons per year of a combination of hazardous air pollutants. The highest single potential HAP emission rate is 2.8 tons per year for methanol, and the total potential HAP emission rate is equal to 10.2 tons per year.

TABLE 1
SCA Tissue North America LLC
Gary, IN Paper Mill
Potential-to-Emit Emission Rate Summary, Tons per Year

Emission Source Description	PM/PM$_{10}$	SO_2	NO_x	CO	VOC	Lead	H_2SO_4	acetaldehyde	arsenic	benzene	biphenyl	carbon disulfide	cadmium	chloroform	chromium	cobalt	cumene	dichlorobenzene	formaldehyde	hexane	manganese	mercury	methanol	methyl ethyl ketone	methylene chloride	naphthalene	nickel	phenol	propionaldehyde	toluene
Pulping - Wastepaper Handling	6.00E-02																													
Pulping - Bales Handling	5.00E-02																													
Paper Machine wet end	4.11E+00																													
Paper Machine vacuum pumps	9.39E-01																													
Paper Machine Yankee Dryer Exhaust (Stack # 2 and Stack # 3)	1.88E+00																													
DE pulper & dust system	7.51E+00																													
Pulping & Paper Machine emissions subtotal	*1.45E+01*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Unpaved roads	3.50E-01																													
Paved roads	1.88E+00																													
Fugitive Road Emissions sub-total	*2.23*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Boiler (Stack # 1)	2.42E+00	1.91E-01	3.18E+01	2.68E+01	1.75E+00	1.59E-04	2.90E-03		6.37E-05	6.69E-04			3.50E-04		4.46E-04	2.67E-05		3.82E-04	2.39E-02		1.21E-04	8.28E-05				1.94E-04	6.69E-04			1.08E-03
Heaters	6.00E-02	4.00E-03	7.30E-01	6.20E-01	4.00E-02	3.67E-06	1.00E-04		1.47E-06	1.54E-05			8.07E-06		1.03E-05	6.16E-07		8.80E-06	5.50E-04		2.79E-06	1.91E-06				4.48E-06	1.54E-05			2.49E-05
Combustion Source emissions sub-total	*2.48E+00*	*1.95E-01*	*3.26E+01*	*2.74E+01*	*1.79E+00*	*1.63E-04*	*3.00E-03*	*0.00E+00*	*6.52E-05*	*6.84E-04*	*0.00E+00*	*0.00E+00*	*3.58E-04*	*0.00E+00*	*4.56E-04*	*2.74E-05*	*0.00E+00*	*3.91E-04*	*2.44E-02*	*0.00E+00*	*1.24E-04*	*8.47E-05*	*0.00E+00*	*0.00E+00*	*0.00E+00*	*1.99E-04*	*6.84E-04*	*0.00E+00*	*0.00E+00*	*1.11E-03*
Pulp Mill Chemicals (see Table 3)					1.69E-01																									
Pulp Mill pulpers & washers (hypochlorite)					1.31E-01									1.31E-01																
Pulp Mill fiber					2.41E+00			1.09E-01			9.90E-03	0.0753		2.20E-03			5.00E-05		3.20E-03				1.03E+00	4.86E-02	3.97E-02	2.00E-03		0.0433	1.48E-02	1.12E+00
Pulping Area emissions subtotal	*0*	*0*	*0*	*0*	*2.71E+00*	*0*	*0*	*1.09E-01*	*0*	*0*	*9.90E-03*	*7.53E-02*	*0*	*1.33E-01*	*0*	*0*	*5.00E-05*	*0*	*3.20E-03*	*0*	*0*	*0*	*1.03E+00*	*4.86E-02*	*3.97E-02*	*2.00E-03*	*0*	*0.0433*	*1.48E-02*	*1.12E+00*
Paper Machine Chemicals (see Table 3)					5.28E+00																									
Paper Machine Chemicals (see Table 3)					8.27E+00																									
Headbox Discharge					1.41E+00			2.43E-01			4.33E-01	5.03E-01							5.00E-03				3.64E-01		2.65E-02			5.06E-01	3.54E-02	1.33E-01
Fan Pump Silo					7.20E-02			8.20E-03						1.78E-02					8.00E-05				2.14E-02	1.90E-03				7.00E-04	2.22E-02
Vacuum Systems					3.83E-01			1.01E-01			4.33E-02	1.38E-01		4.58E-02					2.00E-04				1.03E-01	2.00E-04		9.00E-04			1.15E-02	4.09E-02
Yankee Dryer & After Dryer (Stack # 2 and Stack # 3)					3.44E+00			2.48E-01			1.88E+00						1.04E-01		2.65E-01				1.32E+00			8.91E-01				
Paper Machine Area emissions subtotal	*0.00E+00*	*0.00E+00*	*0.00E+00*	*0.00E+00*	*1.89E+01*	*0.00E+00*	*0.00E+00*	*6.00E-01*	*0.00E+00*	*0.00E+00*	*2.36E+00*	*6.41E-01*	*0.00E+00*	*6.36E-02*	*0.00E+00*	*0.00E+00*	*1.04E-01*	*0.00E+00*	*2.70E-01*	*0.00E+00*	*0.00E+00*	*0.00E+00*	*1.81E+00*	*2.10E-03*	*2.65E-02*	*8.92E-01*	*0.00E+00*	*5.06E-01*	*4.76E-02*	*1.96E-01*
Chemical Storage Tanks																														
Tank # 4-Diesel Fuel Oil-Fire Water Pump (Stack # 4)					5.50E-05																									
Tank # 5-Diesel Fuel Oil					5.50E-05																									
Boiler Water Treatment Chemicals (see Table 3)					5.95E-01																									
Wastewater Treatment Chemicals					0.00E+00																									
Cooling Tower Treatment Chemicals					0.00E+00																									
Parts Washer Solvent (see Table 3)					1.70E-01																									
Electric Arc Welding	7.50E-04					4.86E-06																								
GRAND TOTALS FOR FACILITY	1.93E+01	1.95E-01	3.26E+01	2.74E+01	2.41E+01	1.68E-04	3.00E-03	7.09E-01	6.52E-05	6.84E-04	2.37E+00	7.16E-01	3.58E-04	1.96E-01	4.56E-04	2.74E-05	1.04E-01	3.91E-04	2.98E-01	0.00E+00	1.24E-04	8.47E-05	2.84E+00	5.07E-02	6.62E-02	8.94E-01	6.84E-04	5.49E-01	6.24E-02	1.32E+00

Grand Total for all HAP's 10.17

Grand Total for HAP's-VOC's 9.45

Grand Total for HAP's-metals 0.002

TABLE 2
SCA TISSUE NORTH AMERICA LLC
GARY, INDIANA
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR CRITERIA POLLUTANTS

Note: PTE usages based on estimated usages for 2001 times escalation factor of 1.29

Sources	Maximum Production or Usage or Emissions	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (lb/hr)	PTE (tpy)
Pulping - Wastepaper Handling	28,281	ODT/yr	PM/PM_{10}	0.00449	lb/ODT	AP42 13.2.4 k*0.0032*(U/5)^1.3/(M/2)^1.4 k=.4,U=7.1, M=1%	0.014	0.06
Pulping - Bales Handling	24,011	ODT/yr	PM/PM_{10}	0.00449	lb/ODT	AP42 13.2.4 k*0.0032*(U/5)^1.3/(M/2)^1.4 k=.4,U=7.1, M=1%	0.011	0.05
Paper Machine wet end	45,625	MDT/yr	PM/PM_{10}	0.18	lb/ton	8/95 stack tests Menasha PM 1&2	0.938	4.11
Paper Machine vacuum pumps	45,625	MDT/yr	PM/PM_{10}	0.21	lb/hr	0.0005 gr/CF, 50000 cfm (estimate)	0.21	0.94
Paper Machine Yankee Exhaust (Stack #'s 2-3)	45,625	MDT/yr	PM/PM_{10}	0.43	lb/hr	0.001 gr/CF, 50000 cfm (estimate)	0.429	1.88
DE pulper & dust system	45,625	MDT/yr	PM/PM_{10}	1.71	lb/hr	0.002 gr/CF, 100000 cfm (estimate)	1.71	7.51
Boiler (Stack # 1)	636.852	MMCF/yr	PM/PM_{10}	7.6	lb/MMCF	AP42 Tbl 1.4-2 (2/98)	0.553	2.42
Space Heaters	14.673	MMCF/yr	PM/PM_{10}	7.6	lb/MMCF	AP42 Tbl 1.4-2 (2/98)	0.014	0.06
Unpaved roads	571	VMT	PM/PM_{10}	1.21	lb/VMT	AP42, 13.2.2 (9/98)	0.08	0.35
Paved roads	2,282	VMT	PM/PM_{10}	1.65	lb/VMT	AP42, 13.2.1 (10/97)	0.429	1.88
Facility Total			**PM/PM_{10}**				**4.40**	**19.26**
Boiler (Stack # 1)	636.852	MMCF/yr	SO_2	0.6	lb/MMCF	AP42 Tbl 1.4-2 (2/98)	0.044	0.191
Heaters	14.673	MMCF/yr	SO_2	0.6	lb/MMCF	AP42 Tbl 1.4-2 (2/98)	0.001	0.004
Facility Total			**SO_2**				**0.045**	**0.195**
Boiler (Stack # 1)	0.191	tpy	H_2SO_4 mist	1%		H_2SO_4/SO_2 NCASI	0.0007	0.0029
Heaters	0.004	tpy	H_2SO_4 mist	1%		H_2SO_4/SO_2 NCASI	0	0.0001
Facility Total			**H_2SO_4 mist**				**0.0007**	**0.003**
Boiler (Stack # 1)	636.852	MMCF/yr	NO_x	100	lb/MMCF	AP42 Tbl 1.4-1 (2/98)	7.269	31.84
Heaters	14.673	MMCF/yr	NO_x	100	lb/MMCF	AP42 Tbl 1.4-1 (2/98)	0.167	0.73
Facility Total			**NO_x**				**7.436**	**32.57**
Boiler (Stack # 1)	636.852	MMCF/yr	CO	84	lb/MMCF	AP42 Tbl 1.4-1 (2/98)	6.107	26.75
Heaters	14.673	MMCF/yr	CO	84	lb/MMCF	AP42 Tbl 1.4-1 (2/98)	0.142	0.62
Facility Total			**CO**				**6.249**	**27.37**
Pulp Mill chemicals	339	lb/yr VOC	VOC			see Table 3	0.039	0.169
Pulp Mill pulpers & washers (hypochlorite)	0.1305	tpy	VOC			chloroform from hypochlorite (see Table 4)	0.030	0.131
Pulp Mill fiber	45,625	ODT/yr	VOC	1.06E-1	lb/ODT	NCASI TB 739 Table 5-20	0.550	2.410
Pulping Area sub-total			*VOC*				*0.619*	*2.710*
Paper Machine chemicals (Stack #' 2-3 and fugitives)	10,556	lb/yr VOC	VOC			see Table 3	1.205	5.278
Paper Machine chemicals (Stack #'s 2-3)	16,544	lb/yr VOC	VOC			see Table 3	1.889	8.272
Headbox Discharge	48,160	ADT/yr	VOC	5.85E-2	lb/ADTFP	NCASI TB 740 Table 5-15	0.322	1.409
Fan Pump Silo	48,160	ADT/yr	VOC	3.00E-3	lb/ADTFP	NCASI TB 740 Table 5-41	0.016	0.072
Vacuum Systems	48,160	ADT/yr	VOC	1.59E-2	lb/ADTFP	NCASI TB 740 Table 5-15	0.087	0.383
Yankee Dryer & After Dryer (Stack # 2 and Stack # 3)	48,160	ADT/yr	VOC	1.43E-1	lb/ADTFP	NCASI TB 740 Table 5-16	0.785	3.439
Paper Machine Area sub-total			*VOC*				*4.304*	*18.853*
Chemical Storage Tanks								
Tank # 4-Diesel Fuel Oil-Fire Water Pump (Stack # 4)	500	gallons	VOC			U.S. EPA TANKS Program, v.4.09	1.260E-05	5.500E-05
Tank # 5-Diesel Fuel Oil	500	gallons	VOC			U.S. EPA TANKS Program, v.4.09	1.260E-05	5.500E-05
Boiler (Stack # 1)	636.852	MMCF/yr	VOC	5.5	lb/MMCF	AP42 Tbl 1.4-2 (2/98)	0.400	1.751
Heaters	14.673	MMCF/yr	VOC	5.5	lb/MMCF	AP42 Tbl 1.4-2 (2/98)	0.009	0.040
Boiler Area chemicals	1,190	lb/yr VOC	VOC			see Table 3	0.136	0.595
Wastewater Treatment	0	lbs/yr	VOC			see Table 3	0.000	0.000
Cooling Tower	0	lbs/yr	VOC			see Table 3	0.000	0.000
Parts Washer Solvent 150	340	lbs/yr	VOC			see Table 3	0.039	0.170
Electric Arc Welding	0.00075	ton/yr	PM_{10}	25.0	lb/M lb	AP42 Table 12.19-1 thru -2	0.15	0.00075
						Facility Totals:	**5.7**	**24.1**

TABLE 3
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
Potential-to-Emit Emission Calculations for VOC-Containing Chemicals

Note: For purposes of emission calculations, all VOCs are assumed to be emitted to the atmosphere (maximum lbs/yr of product usage @ 8760 hr/yr x VOC content = lbs VOCs emitted)

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

Chemical Name	VOC (%)	PTE USAGE (lb/yr)	PTE VOC (lb/yr)	PTE VOC (ton/yr)
Sodium Hypochlorite	0.0	253,634	0.0	0.0
Spectrum RX1000	2.0	16,929	339	0.17
Pulping Area sub-total			339	0.17
Kaolin Clay	0.0	65,651	0.0	0.0
Amres LA12-2 (wet strength resin)	0.15	822,716	1,234	0.62
Parez 631	0.0	2,076,193	0.0	0.0
Prestige 8520	90.0	10,356	9,321	4.66
Prestige 9050	0.0	13,796	0.0	0.0
Wickit 1362	0.003	49,149	1.5	0.001
NALCO 7607	0.0	2,325	0.0	0.0
Paper Machine area sub-total			10,556	5.28
Unisoft 804 (coating)	0.5	80,877	404	0.20
Houghton 247 (release)	6.3	246,404	15,523	7.76
Paper Machine area sub-total			15,928	7.96
Water Softener Salt	0.0	56,657	0.0	0.0
Steamate NA2460	48.0	1,644	789	0.39
Cortrol OS5300	27.0	1,486	401	0.20
Optisperse AP200	0.0	5,963	0.0	0.0
Boiler water treatment area sub-total			1,190	0.60
CB2691&92	0.0	5,913.4	0.0	0.0
DAF polymer	0.0	12,155	0.0	0.0
Wastewater treatment sub-total			0.0	0.00
Cooling Tower Treatment Chemicals	0	varies	0	0.00
Parts Washer Solvent 150	100.0	340	340	0.17
GRAND TOTAL			**28,353 LB/YR**	**14.18 TON/YR**

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Pulp Mill VOC	45,625	ODT/yr	acetaldehyde	4.78E-3	lb/ODTP	NCASI 739 tbl 5-20	1.09E-01	2.49E-02
Pulp Mill VOC	45,625	ODT/yr	biphenyl	4.32E-4	lb/ODTP	NCASI 739 tbl 5-20	9.90E-03	2.30E-03
Pulp Mill VOC	45,625	ODT/yr	carbon disulfide	3.30E-3	lb/ODTP	NCASI 737 tbl 6-1	7.53E-02	1.72E-02
Pulp Mill VOC	45,625	ODT/yr	chloroform	9.74E-5	lb/ODTP	NCASI 739 tbl 5-20	2.20E-03	5.00E-04
Pulp Mill pulpers & washers	45,625	ODT/yr	chloroform from hypo	0.00572	lb/ODTP	NCASI 649	1.31E-01	2.98E-02
			Eq 7 NCASI TB 649	Cb =	Ka * Ca(0) / (Kb-Ka) * (e^(-Ka*t) - e^(-Kb*t))			
				Cb =	0.00572 lb/ODT			
			Eq 20 NCASI TB 649	Ca(0) =	0.00163 * (T-100)^1.4 + 0.163			
				T =	100 °F (temperature)			
				Ca(0) =	0.163 lb/ODT initial conc			
				t =	20 minutes (time)			
			Eq 19 NCASI TB 649	Ka =	0.0009107 *(10^(pH-14)*(1-cons)/cons)^0.1*hypo^1			
					pH = 7.5			
					11% consistency			
				hypo =	7.11 lb/ODT hypochlorite charge			
				Ka =	0.001787 dimensionless			
			Eq 10 NCASI TB 649	Kb =	1.61*10^14' (1-cons)/cons*10^(pH-14)*e^(-12300/°K)			
				Temp =	310.8 °K			
				Kb =	2.68E-09 dimensionless			
Pulp Mill VOC	45,625	ODT/yr	cumene	2.40E-6	lb/ODTP	NCASI 739 tbl 5-20	5.00E-05	1.00E-05
Pulp Mill VOC	45,625	ODT/yr	formaldehyde	1.42E-4	lb/ODTP	NCASI 739 tbl 5-20	3.20E-03	7.00E-04
Pulp Mill VOC	45,625	ODT/yr	methanol	4.51E-2	lb/ODTP	NCASI 739 tbl 5-20	1.03E+00	2.35E-01
Pulp Mill VOC	45,625	ODT/yr	methyl ethyl ketone (MEK)	2.13E-3	lb/ODTP	NCASI 739 tbl 5-20	4.86E-02	1.11E-02
Pulp Mill VOC	45,625	ODT/yr	methylene chloride	1.74E-3	lb/ODTP	NCASI 739 tbl 5-20	3.97E-02	9.10E-03
Pulp Mill VOC	45,625	ODT/yr	naphthalene	8.90E-5	lb/ODTP	NCASI 739 tbl 5-20	2.00E-03	5.00E-04
Pulp Mill VOC	45,625	ODT/yr	phenol	1.90E-3	lb/ODTP	NCASI 739 tbl 5-20	4.33E-02	9.90E-03
Pulp Mill VOC	45,625	ODT/yr	proprionaldehyde	6.48E-4	lb/ODTP	NCASI 739 tbl 5-20	1.48E-02	3.40E-03
Pulp Mill VOC	45,625	ODT/yr	toluene	4.91E-2	lb/ODTP	NCASI 739 tbl 5-20	1.12E+00	2.56E-01
Pulping Area sub-total			**HAPs-VOC's**				**2.63**	**0.60**
Headbox Area	48,160	ADT/yr	acetaldehyde	1.01E-2	lb/ADTFP	NCASI 740 tbl 5-15	2.43E-01	5.55E-02
Vacuum Systems	48,160	ADT/yr	acetaldehyde	4.18E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.01E-01	2.30E-02
Fan Pump Silo	48,160	ADT/yr	acetaldehyde	3.40E-4	lb/ADTFP	NCASI 740 tbl 5-41	8.20E-03	1.90E-03
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	acetaldehyde	1.03E-2	lb/ADTFP	NCASI 740 tbl 5-42	2.48E-01	5.66E-02
Headbox Area	48,160	ADT/yr	biphenyl	1.80E-2	lb/ADTFP	NCASI 740 tbl 5-41	4.33E-01	9.89E-02
Vacuum Systems	48,160	ADT/yr	biphenyl	1.80E-3	lb/ADTFP	NCASI 740 tbl 5-41	4.33E-02	9.90E-03
Yankee Dryer (Stack #' 2-3)	48,160	ADT/yr	biphenyl	7.80E-2	lb/ADTFP	NCASI 740 tbl 5-42	1.88E+00	4.29E-01
Headbox Area	48,160	ADT/yr	carbon disulfide	2.09E-2	lb/ADTFP	NCASI 740 tbl 5-15	5.03E-01	1.15E-01
Vacuum Systems	48,160	ADT/yr	carbon disulfide	5.71E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.38E-01	3.14E-02
Fan Pump Silo	48,160	ADT/yr	chloroform	7.40E-4	lb/ADTFP	NCASI 740 tbl 5-41	1.78E-02	4.10E-03
Vacuum Systems	48,160	ADT/yr	chloroform	1.90E-3	lb/ADTFP	NCASI 740 tbl 5-41	4.58E-02	1.05E-02

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Yankee Dryer (Stack #' 2-3)	48,160	ADT/yr	cumene	4.30E-3	lb/ADTFP	NCASI 740 tbl 5-16	1.04E-01	2.36E-02
Headbox Area	48,160	ADT/yr	formaldehyde	2.07E-4	lb/ADTFP	NCASI 740 tbl 5-15	5.00E-03	1.10E-03
Vacuum Systems	48,160	ADT/yr	formaldehyde	7.60E-6	lb/ADTFP	NCASI 740 tbl 5-15	2.00E-04	0.00E+00
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	formaldehyde	1.10E-2	lb/ADTFP	NCASI 740 tbl 5-16	2.65E-01	6.05E-02
Fan Pump Silo	48,160	ADT/yr	formaldehyde	3.30E-6	lb/ADTFP	NCASI 740 tbl 5-41	8.00E-05	2.00E-05
Headbox Area	48,160	ADT/yr	methanol	1.51E-2	lb/ADTFP	NCASI 740 tbl 5-15	3.64E-01	8.30E-02
Vacuum Systems	48,160	ADT/yr	methanol	4.28E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.03E-01	2.35E-02
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	methanol	5.50E-2	lb/ADTFP	NCASI 740 tbl 5-16	1.32E+00	3.02E-01
Fan Pump Silo	48,160	ADT/yr	methanol	8.90E-4	lb/ADTFP	NCASI 740 tbl 5-41	2.14E-02	4.90E-03
Vacuum Systems	48,160	ADT/yr	methyl ethyl ketone (MEK)	9.40E-6	lb/ADTFP	NCASI 740 tbl 5-15	2.00E-04	0.00E+00
Fan Pump Silo	48,160	ADT/yr	methyl ethyl ketone (MEK)	7.90E-5	lb/ADTFP	NCASI 740 tbl 5-41	1.90E-03	4.00E-04
Headbox Area	48,160	ADT/yr	methylene chloride	1.10E-3	lb/ADTFP	NCASI 740 tbl 5-41	2.65E-02	6.10E-03
Vacuum Systems	48,160	ADT/yr	naphthalene	3.60E-5	lb/ADTFP	NCASI 740 tbl 5-15	9.00E-04	2.00E-04
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	naphthalene	3.70E-2	lb/ADTFP	NCASI 740 tbl 5-16	8.91E-01	2.03E-01
Headbox Area	48,160	ADT/yr	phenol	2.10E-2	lb/ADTFP	NCASI 740 tbl 5-41	5.06E-01	1.16E-01
Headbox Area	48,160	ADT/yr	propionaldehyde	1.47E-3	lb/ADTFP	NCASI 740 tbl 5-15	3.54E-02	8.10E-03
Vacuum Systems	48,160	ADT/yr	propionaldehyde	4.77E-4	lb/ADTFP	NCASI 740 tbl 5-15	1.15E-02	2.60E-03
Fan Pump Silo	48,160	ADT/yr	propionaldehyde	2.70E-5	lb/ADTFP	NCASI 740 tbl 5-41	7.00E-04	2.00E-04
Headbox Area	48,160	ADT/yr	toluene	5.53E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.33E-01	3.04E-02
Fan Pump Silo	48,160	ADT/yr	toluene	9.20E-4	lb/ADTFP	NCASI 740 tbl 5-41	2.22E-02	5.10E-03
Vacuum Systems	48,160	ADT/yr	toluene	1.70E-3	lb/ADTFP	NCASI 740 tbl 5-41	4.09E-02	9.30E-03
Paper Machine Area sub-total			**HAPs-VOC's**				**7.52**	**1.72**

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Boiler (Stack # 1)	636.852	MMCF/yr	lead (Pb) compounds	5.00E-4	lb/MMCF	AP-42 Table 1.4-2	1.59E-4	3.64E-5
Space heaters	14.673	MMCF/yr	lead (Pb) compounds	5.00E-4	lb/MMCF	AP-42 Table 1.4-2	3.67E-6	8.38E-7
Boiler (Stack # 1)	636.852	MMCF/yr	benzene	2.10E-3	lb/MMCF	AP-42 Table 1.4-3	6.69E-4	1.53E-4
Space heaters	14.673	MMCF/yr	benzene	2.10E-3	lb/MMCF	AP-42 Table 1.4-3	1.54E-5	3.52E-6
Boiler (Stack # 1)	636.852	MMCF/yr	dichlorobenzene	1.20E-3	lb/MMCF	AP-42 Table 1.4-3	3.82E-4	8.72E-5
Space heaters	14.673	MMCF/yr	dichlorobenzene	1.20E-3	lb/MMCF	AP-42 Table 1.4-3	8.80E-6	2.01E-6
Boiler (Stack # 1)	636.852	MMCF/yr	formaldehyde	7.50E-2	lb/MMCF	AP-42 Table 1.4-3	2.39E-2	5.45E-3
Space heaters	14.673	MMCF/yr	formaldehyde	7.50E-2	lb/MMCF	AP-42 Table 1.4-3	5.50E-4	1.26E-4
Boiler (Stack # 1)	636.852	MMCF/yr	napthalene	6.10E-4	lb/MMCF	AP-42 Table 1.4-3	1.94E-4	4.43E-5
Space heaters	14.673	MMCF/yr	napthalene	6.10E-4	lb/MMCF	AP-42 Table 1.4-3	4.48E-6	1.02E-6
Boiler (Stack # 1)	636.852	MMCF/yr	toluene	3.40E-3	lb/MMCF	AP-42 Table 1.4-3	1.08E-3	2.47E-4
Space heaters	14.673	MMCF/yr	toluene	3.40E-3	lb/MMCF	AP-42 Table 1.4-3	2.49E-5	5.70E-6
Boiler (Stack # 1)	636.852	MMCF/yr	arsenic	2.00E-4	lb/MMCF	AP-42 Table 1.4-4	6.37E-5	1.45E-5
Space heaters	14.673	MMCF/yr	arsenic	2.00E-4	lb/MMCF	AP-42 Table 1.4-4	1.47E-6	3.35E-7
Boiler (Stack # 1)	636.852	MMCF/yr	cadmium	1.10E-3	lb/MMCF	AP-42 Table 1.4-4	3.50E-4	8.00E-5
Space heaters	14.673	MMCF/yr	cadmium	1.10E-3	lb/MMCF	AP-42 Table 1.4-4	8.07E-6	1.84E-6
Boiler (Stack # 1)	636.852	MMCF/yr	chromium	1.40E-3	lb/MMCF	AP-42 Table 1.4-4	4.46E-4	1.02E-4
Space heaters	14.673	MMCF/yr	chromium	1.40E-3	lb/MMCF	AP-42 Table 1.4-4	1.03E-5	2.35E-6
Boiler (Stack # 1)	636.852	MMCF/yr	cobalt	8.40E-5	lb/MMCF	AP-42 Table 1.4-4	2.67E-5	6.11E-6
Space heaters	14.673	MMCF/yr	cobalt	8.40E-5	lb/MMCF	AP-42 Table 1.4-4	6.16E-7	1.41E-7
Boiler (Stack # 1)	636.852	MMCF/yr	manganese	3.80E-4	lb/MMCF	AP-42 Table 1.4-4	1.21E-4	2.76E-5
Space heaters	14.673	MMCF/yr	manganese	3.80E-4	lb/MMCF	AP-42 Table 1.4-4	2.79E-6	6.37E-7
Boiler (Stack # 1)	636.852	MMCF/yr	mercury	2.60E-4	lb/MMCF	AP-42 Table 1.4-4	8.28E-5	1.89E-5
Space heaters	14.673	MMCF/yr	mercury	2.60E-4	lb/MMCF	AP-42 Table 1.4-4	1.91E-6	4.36E-7
Boiler (Stack # 1)	636.852	MMCF/yr	nickel	2.10E-3	lb/MMCF	AP-42 Table 1.4-4	6.69E-4	1.53E-4
Space heaters	14.673	MMCF/yr	nickel	2.10E-3	lb/MMCF	AP-42 Table 1.4-4	1.54E-5	3.52E-6

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Boiler HAP VOC's							**2.62E-2**	**5.98E-3**
Boiler HAP metals							**1.92E-3**	**4.38E-4**
Boiler HAP totals							**2.81E-2**	**6.42E-3**
Space heaters HAP VOC's							**6.04E-4**	**1.38E-4**
Space heaters HAP metals							**4.42E-5**	**1.01E-5**
Space heaters HAP totals							**6.48E-4**	**1.48E-4**
Electric Arc Welding	6	electrode/hr 10 hr/yr	Lead	1.62E-1	lb/M lb	AP-42 Table 12.19-1	**4.86E-6**	**9.72E-4**
facility totals			methylene chloride				6.62E-02	1.52E-02
facility totals			acetaldehyde				7.09E-01	1.62E-01
facility totals			arsenic				6.52E-05	1.49E-05
facility totals			benzene				6.84E-04	1.86E+02
facility totals			biphenyl				2.36E+00	5.40E-01
facility totals			cadmium				3.58E-04	8.18E-05
facility totals			carbon disulfide				7.16E-01	1.64E-01
facility totals			chloroform				1.96E-01	4.49E-02
facility totals			chromium				4.56E-04	1.04E-04
facility totals			cobalt				2.74E-05	6.25E-06
facility totals			cumene				1.04E-01	2.36E-02
facility totals			dichlorobenzene				3.91E-04	8.93E-05
facility totals			formaldehyde				2.98E-01	6.79E-02
facility totals			lead (Pb) compounds				1.68E-04	1.01E-03
facility totals			manganese				1.24E-04	2.83E-05
facility totals			mercury				8.47E-05	1.93E-05
facility totals			methanol				2.84E+00	6.49E-01
facility totals			methyl ethyl ketone (MEK)				5.05E-02	1.15E-02
facility totals			naphthalene				8.94E-01	2.04E-01
facility totals			nickel				6.84E-04	1.56E-04
facility totals			phenol				5.49E-01	1.25E-01
facility totals			proprionaldehyde				6.24E-02	3.60E-03
facility totals			toluene				1.32E+00	3.01E-01
Facility Totals			**HAPs**			**Totals:**	**1.02E+01**	**1.88E+02**
Facility Totals			**HAP's-VOC's**			**Totals:**	**9.45E+00**	**1.88E+02**
Facility Totals			**HAP's-metals**			**Totals:**	**1.97E-03**	**1.42E-03**

Note-carbon disulfide is a HAP, but it is not an organic compound or a metal

Note: PTE usages based on maximum rated capacity of plant @ 8760 hr/yr = 45,625 MDT/yr

(chemicals used in 2001 were based on production of 35,390 MDT/yr

-a factor of 1.29 is multiplied by each chemical to determine potential-to-emit at 45,625 MDT/yr

Chemical Name	F/S	Supplier	specific gravity	density (lb/gal)	VOC (%)	VOC (lb/gal)	1998 (lb/yr)	1998 (gal/yr)	'98 VOC (lb/yr)	1999 (lb/yr)	1999 (gal/yr)	2001 Production lb/yr	PTE factor	New PTE based-2001	PTE VOC (lb/yr)	PTE VOC (lb/yr)	max PTE (lb/yr)	PTE VOC (lb/yr)
															OLD	OLD		OLD
Sodium Hypochlorite (not a VOC)	S	Alexander	1.1964	9.98	0.0%		320	32.1		31,204	3,126.7	196,615	1.29	253,634	0.00	253,634	25,320	0
Spectrum RX1000[1]	**S**	**Hercules**	**1.1**	**9.17**	**2.0%**		**13,261**	**1,446.1**		**13,261**	**1,446.1**	**13,123**	**1.29**	**16,929**	**338.58**	16,929	**21,300**	**426**
Pulping Area sub-total	**S**								0						**338.58**	270,563		**426**
Kaolin Clay	**F/S**	**Thiele-Kaolir**	**2.6**	**21.68**	**0**		**29,510**	**1,361.2**		**18,657**	**860.6**	**50,892**	**1.29**	**65,651**	**0.00**	65,651	**38,690**	0
Amres C-12 (wet strength)	**F/S**	**G-P Resins**	**1.04**	**8.67**	**1.10%**		**577160**			**577160**		**637,764**	**1.29**	**822,716**	**9,049.87**	822,716	**927,210**	**10,199**
AR-696	**F/S**	**Betz**	**1.21**	**10.09**	**0**		**0**	**0.0**		**2,600**	**257.7**		**1.29**	**0**	**0.00**	0	**4,180**	**0**
131 DR Plus	**F/S**	**Betz**	**0.98**	**8.17**	**10.89%**								**1.29**	**0**	**0.00** ?		**32,290**	**3,516**
Parez 631 NC, 90% water	F/S	Bayer		8.59	0.00%							1609452	**1.29**	**2,076,193**	**0.00**	2,076,193	**3,996,810**	**0**
HercoBond1000 (dry strength)	F/S	Hercules		8.59	0.057%	(new)	53740			53,740			**1.29**	**0**	**0.00** ?		**86,330**	**49**
Prestige 8520 (felt wash)	F/S	Betz	0.802	6.69	90.0%		7,659	1,144.8	6,893	14,836	2,217.6		**1.29**	**0**	**0.00**	0	**18,070**	**16,263**
Prestige 8520	F/S	Betz	0.802	6.69	90.0%							8,028.0	**1.29**	**10,356**	**9,320.51**	10,356	12,845	11,561
Prestige 9050	F/S	Betz	1.202	10.02	0.0%		3,814	380.6		8,814	879.6	10,694	**1.29**	**13,796**	**0.00**	13,796	10,140	0
Pomtamine Yellow 3GF					3.0%								**1.29**	**0**	**0.00** ?		128	3.8
Protocol CB2000	F/S	Betz	0.936	7.81	0.0%		0	0.0		595	76.2	5,232	**1.29**	**6,749**	**0.00**	6,749	8,320	0
Tabstrip 6	F/S	Tabco			0.0%							132	**1.29**	**170**	**0.00**	170	2,500	
Cartasol Blue GDF Liquid	F/S	Clariant			10.9%								**1.29**	**0**	**0.00** ?		400	44
Catafix GS Liquid	F/S	Clariant	1.13	9.42	0.0%								**1.29**	**0**	**0.00**	0	240	0
Cartosol Brilliant Violet 5BF Liquid	F/S	Clariant	1.09	9.09	5.7%								**1.29**	**0**	**0.00** ?		40	2.3
Wickit 1362	F/S	Hercules	1.02	8.50	0.003%							38,100	**1.29**	**49,149**	**1.47**	49,149	60,800	1.8
Nalco 7607	F/S	Nalco			0.000%							1,802	**1.29**	**2,325**	**0.00**	2,325	2,500	
Renew SC7410	F/S	Betz	1.284	10.71	0.0%		0	0.0		2,918	272.5		**1.29**	**0**	**0.00**	0	4,690	0
Paper Mach sub-total	**F/S**								6,893						**18,371.85**	3,047,105		25,378
Unisoft 804 (coating)	S	Hercules	1.04	8.67	0.5%		32,897	3,794.3	164	32,138	3,706.8	62,695	**1.29**	**80,877**	**404.38**	80,877	52,240	261
Release Agent	S	Hercules	0.88	7.34	7.2%	(new)						191,011	**1.29**	**246,404**	**17,741.12**	246,404	305,714	22,011
Paper Mach sub-total	**S**								164						**18,145.50**	327,281		22,272
Water Softener Salt	F	Indiana	Sugars		0.0%		49,300		0	35,250		43,920	**1.29**	**56,657**	**0.00**	56,657	67,920	0
30 K Series	F	Betz	1.117	9.32	0.0%		186	20.0	0	0	0.0		**1.29**	**0**	**0.00**	0	300	0
KI-2	F	Betz	1.188	9.91	0.0%		535	54.0	0	0	0.0		**1.29**	**0**	**0.00**	0	860	0
Steamate NA2460	F	Betz	0.966	7.854	48.0%							1,274	**1.29**	**1,644**	**789.11**	1,644	10,080	4,838
Cortrol	F	Betz	1.001	8.35	27.0%							1,152	**1.29**	**1,486**	**401.24**	1,486	1,590	429
Ultrasperse AP200	F	Betz	1.081	9.02	0.0%		3,963	439.4	0	3,522	390.5	4,622	**1.29**	**5,963**	**0.00**	5,963	6,010	0
Boiler Area sub-total	**F**								0						**1,190.35**	65,750		5,268
Purachem 8105E (water treat)	F	Hercules	1	8.34	30.0%		9,620	1,153.5	2,886	27,399	3,285.3	5,270	**1.29**	**6,799**	**2,039.64**	6,799		0
CB2691&92	F	Betz	?	?	0.0%							4,584	**1.29**	**5,913**	**0.00**	5,913	0	0
new DAF polymer (water treat)	F	Nalco			0.0%							9,422	**1.29**	**12,155**	**0.00**	12,155	29,740	0
Wastewater Treatment sub-total															**2,039.64**	24,867		0
Bio-Trol 97W (cooling tower)	F	Betz	1.021	8.52	0.0%		593	69.6	0	0	0.0		**1.29**	**0**	**0.00**	0	0	0
Continuum AT220 (cooling twr)	F	Betz	1.245	10.38	0.0%		86	8.3	0	103	9.9		**1.29**	**0**	**0.00**	0	0	0
Spectrus NX 1101 (cooling tower)	F	Betz	1.021	8.52	0.023		118	13.8	3	661	77.6		**1.29**	**0**	**0.00**	0	0	0
Cooling Tower treatment sub-total															**0.00**	0		0
Parts Washer Solvent 150	F	Safety -	Kleen		100%				0			36		**340**	**340.00**	340	340	340

Source	units				1998 Rate		1999		max PTE	
Paper - total	MDT	95%	solids	**125 max tpd**						
wastepaper	tons	95%	solids			34927.4				28280.9
Pulping	ODT	100%	solids		14.6% loss	29842	15.5% loss		15.1% loss	22810
Paper - brown	MDT	95%	solids		5.0% loss	29842	5.0% loss		5.0% loss	22,810
Paper - brown	ADT	90%	solids			31,500				24,080
baled pulp	tons	95%	solids			0				24010.5
Pulping	ODT	100%	solids			0			0.0% loss	22810
Paper - white	MDT	95%	solids		5.0% loss	0	5.0% loss		5.0% loss	22,810
Paper - white	ADT	90%	solids			0				24,080
boiler - nat gas	therms	95%	100000	Btu/therm		2648860				
heaters - nat gas	therms	5%	1000	Btu/CF		139410				
Total nat gas	therms					2788270				
boiler - nat gas	MMBtu	72.7	MMBtu/hr			264886				636852
heaters - nat gas	MMBtu	1.675	MMBtu/hr			13941				14673
Total nat gas	MMBtu					278827				651525
boiler - nat gas	MMCF	0.0727	MMCF/hr			264.886				636.852
heaters - nat gas	MMCF	0.001675	MMCF/hr			13.941				14.673
Total nat gas	MMCF					278.827				651.525

(1)-this material was not used until the year 2000-assumption is made that material was used in 1998 and 1999 only for purposes of calculating a PTE value for the future

(F/S)-f stands for fugitive emission source; S stands for stack emission source

TABLE 1
SCA Tissue North America LLC
Gary, IN Paper Mill
Potential-to-Emit Emission Rate Summary, Tons per Year

Emission Source Description	PM/PM$_{10}$	SO_2	NO_x	CO	VOC	Lead	H_2SO_4	acetaldehyde	arsenic	benzene	biphenyl	carbon disulfide	cadmium	chloroform	chromium	cobalt	cumene	dichlorobenzene	formaldehyde	hexane	manganese	mercury	methanol	methyl ethyl ketone	methylene chloride	naphthalene	nickel	phenol	propionaldehyde	toluene
Pollutant																														
Pulping - Wastepaper Handling	6.00E-02																													
Pulping - Bales Handling	5.00E-02																													
Paper Machine wet end	4.11E+00																													
Paper Machine vacuum pumps	9.39E-01																													
Paper Machine Yankee Dryer Exhaust (Stack # 2 and Stack # 3)	1.88E+00																													
DE pulper & dust system	7.51E+00																													
Pulping & Paper Machine emissions subtotal	*1.45E+01*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Unpaved roads	3.50E-01																													
Paved roads	1.88E+00																													
Fugitive Road Emissions sub-total	*2.23*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Boiler (Stack # 1)	2.42E+00	1.91E-01	3.18E+01	2.68E+01	1.75E+00	1.59E-04	2.90E-03		6.37E-05	6.69E-04			3.50E-04		4.46E-04	2.67E-05		3.82E-04	2.39E-02		1.21E-04	8.28E-05				1.94E-04	6.69E-04			1.08E-03
Heaters	6.00E-02	4.00E-03	7.30E-01	6.20E-01	4.00E-02	3.67E-06	1.00E-04		1.47E-06	1.54E-05			8.07E-06		1.03E-05	6.16E-07		8.80E-06	5.50E-04		2.79E-06	1.91E-06				4.48E-06	1.54E-05			2.49E-05
Combustion Source emissions sub-total	*2.48E+00*	*1.95E-01*	*3.26E+01*	*2.74E+01*	*1.79E+00*	*1.63E-04*	*3.00E-03*	*0.00E+00*	*6.52E-05*	*6.84E-04*	*0.00E+00*	*0.00E+00*	*3.58E-04*	*0.00E+00*	*4.56E-04*	*2.74E-05*	*0.00E+00*	*3.91E-04*	*2.44E-02*	*0.00E+00*	*1.24E-04*	*8.47E-05*	*0.00E+00*	*0.00E+00*	*0.00E+00*	*1.99E-04*	*6.84E-04*	*0.00E+00*	*0.00E+00*	*1.11E-03*
Pulp Mill Chemicals (see Table 3)					1.69E-01																									
Pulp Mill pulpers & washers (hypochlorite)					1.31E-01									1.31E-01																
Pulp Mill fiber					2.41E+00			1.09E-01			9.90E-03	0.0753		2.20E-03			5.00E-05		3.20E-03				1.03E+00	4.86E-02	3.97E-02	2.00E-03		0.0433	1.48E-02	1.12E+00
Pulping Area emissions subtotal	*0*	*0*	*0*	*0*	*2.71E+00*	*0*	*0*	*1.09E-01*	*0*	*0*	*9.90E-03*	*7.53E-02*	*0*	*1.33E-01*	*0*	*0*	*5.00E-05*	*0*	*3.20E-03*	*0*	*0*	*0*	*1.03E+00*	*4.86E-02*	*3.97E-02*	*2.00E-03*	*0*	*0.0433*	*1.48E-02*	*1.12E+00*
Paper Machine Chemicals (Stack #' 2-3 and fugitives)(see Table 3)					5.28E+00																									
Paper Machine Chemicals (Stack #'s 2-3)(see Table 3)					9.07E+00																									
Headbox Discharge					1.41E+00			2.43E-01			4.33E-01	5.03E-01							5.00E-03				3.64E-01		2.65E-02			5.06E-01	3.54E-02	1.33E-01
Fan Pump Silo					7.20E-02			8.20E-03						1.78E-02					8.00E-05				2.14E-02	1.90E-03					7.00E-04	2.22E-02
Vacuum Systems					3.83E-01			1.01E-01			4.33E-02	1.38E-01		4.58E-02					2.00E-04				1.03E-01	2.00E-04		9.00E-04			1.15E-02	4.09E-02
Yankee Dryer & After Dryer (Stack # 2 and Stack # 3)					3.44E+00			2.48E-01			1.88E+00						1.04E-01		2.65E-01				1.32E+00			8.91E-01				
Paper Machine Area emissions subtotal	*0.00E+00*	*0.00E+00*	*0.00E+00*	*0.00E+00*	*1.97E+01*	*0.00E+00*	*0.00E+00*	*6.00E-01*	*0.00E+00*	*0.00E+00*	*2.36E+00*	*6.41E-01*	*0.00E+00*	*6.36E-02*	*0.00E+00*	*0.00E+00*	*1.04E-01*	*0.00E+00*	*2.70E-01*	*0.00E+00*	*0.00E+00*	*0.00E+00*	*1.81E+00*	*2.10E-03*	*2.65E-02*	*8.92E-01*	*0.00E+00*	*5.06E-01*	*4.76E-02*	*1.96E-01*
Chemical Storage Tanks																														
Tank # 4-Diesel Fuel Oil-Fire Water Pump (Stack # 4)					5.50E-05																									
Tank # 5-Diesel Fuel Oil					5.50E-05																									
Boiler Water Treatment Chemicals (see Table 3)					5.95E-01																									
Wastewater Treatment Chemicals					0.00E+00																									
Cooling Tower Treatment Chemicals					0.00E+00																									
Parts Washer Solvent (see Table 3)					1.70E-01																									
Electric Arc Welding	7.50E-04					4.86E-06																								
GRAND TOTALS FOR FACILITY	1.93E+01	1.95E-01	3.26E+01	2.74E+01	2.49E+01	1.68E-04	3.00E-03	7.09E-01	6.52E-05	6.84E-04	2.37E+00	7.16E-01	3.58E-04	1.96E-01	4.56E-04	2.74E-05	1.04E-01	3.91E-04	2.98E-01	0.00E+00	1.24E-04	8.47E-05	2.84E+00	5.07E-02	6.62E-02	8.94E-01	6.84E-04	5.49E-01	6.24E-02	1.32E+00

Grand Total for all HAP's 10.17

Grand Total for HAP's-VOC's 9.45

Grand Total for HAP's-metals 0.002

Chemicals Used In Secondary Paper Manufacturing; PTE usages based on maximum rated capacity of plant @ 8760 hr/yr = 45,625 MDT/yr

(chemicals used in 2001 were based on production of 35,390 MDT/yr - a factor of 1.29 is multiplied by each chemical to determine potential-to-emit at 45,625 MDT/yr

Chemical Name	F/S	Supplier	specific gravity	density (lb/gal)	VOC (%)	VOC (lb/gal)	1998 (lb/yr)	1998 (gal/yr)	'98 VOC (lb/yr)	1999 (lb/yr)	1999 (gal/yr)	2001 Production lb/yr	PTE factor	New PTE based-2001	PTE VOC (lb/yr)
Sodium Hypochlorite (not a VOC)	S	Alexander	1.1964	9.98	0.0%		320	32.1		31,204	3,126.7	196,615	**1.29**	**253,634**	**0.00**
Spectrum RX1000[(1)]	**S**	**Hercules**	**1.1**	**9.17**	**2.0%**		**13,261**	**1,446.1**		**13,261**	**1,446.1**	**13,123**	**1.29**	**16,929**	**338.58**
Pulping Area sub-total	**S**								0						**338.58**
Kaolin Clay	**F/S**	**Thiele-Kaolin**	**2.6**	**21.68**	**0**		**29,510**	**1,361.2**		**18,657**	**860.6**	**50,892**	**1.29**	**65,651**	**0.00**
Amres C-12 (wet strength)	**F/S**	**G-P Resins**	**1.04**	**8.67**	**1.10%**		**577160**			**577160**		**637,764**	**1.29**	**822,716**	**9,049.87**
AR-696	**F/S**	**Betz**	**1.21**	**10.09**	**0**		**0**	**0.0**		**2,600**	**257.7**		**1.29**	**0**	**0.00**
131 DR Plus	**F/S**	**Betz**	**0.98**	**8.17**	**10.89%**								**1.29**	**0**	**0.00**
Parez 631 NC, 90% water	F/S	Bayer		8.59	0.00%							1609452	**1.29**	**2,076,193**	**0.00**
HercoBond1000 (dry strength)	F/S	Hercules		8.59	0.057%	(new)	53740			53,740			**1.29**	**0**	**0.00**
Prestige 8520 (felt wash)	F/S	Betz	0.802	6.69	90.0%		7,659	1,144.8	6,893	14,836	2,217.6		**1.29**	**0**	**0.00**
Prestige 8520	F/S	Betz	0.802	6.69	90.0%							8,028.0	**1.29**	**10,356**	**9,320.51**
Prestige 9050	F/S	Betz	1.202	10.02	0.0%		3,814	380.6		8,814	879.6	10,694	**1.29**	**13,796**	**0.00**
Pomtamine Yellow 3GF					3.0%								**1.29**	**0**	**0.00**
Protocol CB2000	F/S	Betz	0.936	7.81	0.0%		0	0.0		595	76.2	5,232	**1.29**	**6,749**	**0.00**
Tabstrip 6	F/S	Tabco			0.0%							132	**1.29**	**170**	**0.00**
Cartasol Blue GDF Liquid	F/S	Clariant			10.9%								**1.29**	**0**	**0.00**
Catafix GS Liquid	F/S	Clariant	1.13	9.42	0.0%								**1.29**	**0**	**0.00**
Cartosol Brilliant Violet 5BF Liquid	F/S	Clariant	1.09	9.09	5.7%								**1.29**	**0**	**0.00**
Wickit 1362	F/S	Hercules	1.02	8.50	0.003%							38,100	**1.29**	**49,149**	**1.47**
Nalco 7607	F/S	Nalco			0.000%							1,802	**1.29**	**2,325**	**0.00**
Renew SC7410	F/S	Betz	1.284	10.71	0.0%		0	0.0		2,918	272.5		**1.29**	**0**	**0.00**
Paper Mach sub-total	**F/S**								6,893						**18,371.85**
Unisoft 804 (coating)	S	Hercules	1.04	8.67	0.5%		32,897	3,794.3	164	32,138	3,706.8	62,695	**1.29**	**80,877**	**404.38**
Houghton 247 (release)	S	Hercules	0.88	7.34	6.3%	(new)						191,011	**1.29**	**246,404**	**15,523.48**
Paper Mach sub-total	**S**								164						**15,927.86**
Water Softener Salt	F	Indiana	Sugars		0.0%		49,300		0	35,250		43,920	**1.29**	**56,657**	**0.00**
30 K Series	F	Betz	1.117	9.32	0.0%		186	20.0	0	0	0.0		**1.29**	**0**	**0.00**
KI-2	F	Betz	1.188	9.91	0.0%		535	54.0	0	0	0.0		**1.29**	**0**	**0.00**
Steamate NA2460	F	Betz	0.966	7.854	48.0%							1,274	**1.29**	**1,644**	**789.11**
Cortrol	F	Betz	1.001	8.35	27.0%							1,152	**1.29**	**1,486**	**401.24**
Ultrasperse AP200	F	Betz	1.081	9.02	0.0%		3,963	439.4	0	3,522	390.5	4,622	**1.29**	**5,963**	**0.00**
Boiler Area sub-total	**F**								0						**1,190.35**
Purachem 8105E (water treat)	F	Hercules	1	8.34	30.0%		9,620	1,153.5	2,886	27,399	3,285.3	5,270	**1.29**	**6,799**	**2,039.64**
CB2691&92	F	Betz	?	?	0.0%							4,584	**1.29**	**5,913**	**0.00**
new DAF polymer (water treat)	F	Nalco			0.0%							9,422	**1.29**	**12,155**	**0.00**
Wastewater Treatment sub-total															**2,039.64**
Bio-Trol 97W (cooling tower)	F	Betz	1.021	8.52	0.0%		593	69.6	0	0	0.0		**1.29**	**0**	**0.00**
Continuum AT220 (cooling twr)	F	Betz	1.245	10.38	0.0%		86	8.3	0	103	9.9		**1.29**	**0**	**0.00**
Spectrus NX 1101 (cooling tower)	F	Betz	1.021	8.52	0.023		118	13.8	3	661	77.6		**1.29**	**0**	**0.00**
Cooling Tower treatment sub-total															**0.00**
Parts Washer Solvent 150	F	Safety -	Kleen		100%				0			36		**340**	**340.00**

(1)-this material was not used until the year 2000-assumption is made that material was used in 1998 and 1999 only for purposes of calculating a PTE value for the future

(F/S)-f stands for fugitive emission source; S stands for stack emission source

TABLE 3
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
Potential-to-Emit Emission Calculations for VOC-Containing Chemicals

Note: For purposes of emission calculations, all VOCs are assumed to be emitted to the atmosphe
(maximum lbs/yr of product usage @ 8760 hr/yr x VOC content = lbs VOCs emitted)

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

Chemical Name	VOC (%)	PTE USAGE (lb/yr)	PTE VOC (lb/yr)	PTE VOC (ton/yr)
Sodium Hypochlorite	0.0	253,634	0.0	0.0
Spectrum RX1000	2.0	16,929	339	0.17
Pulping Area sub-total			339	0.17
Kaolin Clay	0.0	65,651	0.0	0.0
Amres LA12-2 (wet strength resin)	0.15	822,716	1,234	0.62
Parez 631	0.0	2,076,193	0.0	0.0
Prestige 8520	90.0	10,356	9,321	4.66
Prestige 9050	0.0	13,796	0.0	0.0
Wickit 1362	0.003	49,149	1.5	0.001
NALCO 7607	0.0	2,325	0.0	0.0
Paper Machine area sub-total			10,556	5.28
Unisoft 804 (coating)	0.5	80,877	404	0.20
Release agent	6.55	246,404	16,139	8.07
Paper Machine area sub-total			16,544	8.27
Water Softener Salt	0.0	56,657	0.0	0.0
Steamate NA2460	48.0	1,644	789	0.39
Cortrol OS5300	27.0	1,486	401	0.20
Optisperse AP200	0.0	5,963	0.0	0.0
Boiler water treatment area sub-total			1,190	0.60
CB2691&92	0.0	5,913.4	0.0	0.0
DAF polymer	0.0	12,155	0.0	0.0
Wastewater treatment sub-total			0.0	0.00
Cooling Tower Treatment Chemicals	0	varies	0	0.00
Parts Washer Solvent 150	100.0	340	340	0.17
GRAND TOTAL			**28,969 LB/YR**	**14.48 TON/YR**

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Pulp Mill VOC	45,620	ODT/yr	acetaldehyde	4.78E-3	lb/ODTP	NCASI 739 tbl 5-20	1.09E-01	2.49E-02
Pulp Mill VOC	45,620	ODT/yr	biphenyl	4.32E-4	lb/ODTP	NCASI 739 tbl 5-20	9.90E-03	2.30E-03
Pulp Mill VOC	45,620	ODT/yr	carbon disulfide	3.30E-3	lb/ODTP	NCASI 737 tbl 6-1	7.53E-02	1.72E-02
Pulp Mill VOC	45,620	ODT/yr	chloroform	9.74E-5	lb/ODTP	NCASI 739 tbl 5-20	2.20E-03	5.00E-04
Pulp Mill pulpers & washers	45,620	ODT/yr	chloroform from hypo	0.00572	lb/ODTP	NCASI 649	1.31E-01	2.98E-02
			Eq 7 NCASI TB 649	Cb =	Ka * Ca(0) / (Kb-Ka) * (e^(-Ka*t) - e^(-Kb*t))			
				Cb =	0.00572 lb/ODT			
			Eq 20 NCASI TB 649	Ca(0) =	0.00163 * (T-100)^1.4 + 0.163			
				T =	100 °F (temperature)			
				Ca(0) =	0.163 lb/ODT initial conc			
				t =	20 minutes (time)			
			Eq 19 NCASI TB 649	Ka =	0.0009107 *(10^(pH-14)*(1-cons)/cons)^0.1*hypo^1			
					pH = 7.5			
					11% consistency			
				hypo =	7.11 lb/ODT hypochlorite charge			
				Ka =	0.001787 dimensionless			
			Eq 10 NCASI TB 649	Kb =	1.61*10^14' (1-cons)/cons*10^(pH-14)*e^(-12300/ºK)			
				Temp =	310.8 °K			
				Kb =	2.68E-09 dimensionless			
Pulp Mill VOC	45,620	ODT/yr	cumene	2.40E-6	lb/ODTP	NCASI 739 tbl 5-20	5.00E-05	1.00E-05
Pulp Mill VOC	45,620	ODT/yr	formaldehyde	1.42E-4	lb/ODTP	NCASI 739 tbl 5-20	3.20E-03	7.00E-04
Pulp Mill VOC	45,620	ODT/yr	methanol	4.51E-2	lb/ODTP	NCASI 739 tbl 5-20	1.03E+00	2.35E-01
Pulp Mill VOC	45,620	ODT/yr	methyl ethyl ketone (MEK)	2.13E-3	lb/ODTP	NCASI 739 tbl 5-20	4.86E-02	1.11E-02
Pulp Mill VOC	45,620	ODT/yr	methylene chloride	1.74E-3	lb/ODTP	NCASI 739 tbl 5-20	3.97E-02	9.10E-03
Pulp Mill VOC	45,620	ODT/yr	naphthalene	8.90E-5	lb/ODTP	NCASI 739 tbl 5-20	2.00E-03	5.00E-04
Pulp Mill VOC	45,620	ODT/yr	phenol	1.90E-3	lb/ODTP	NCASI 739 tbl 5-20	4.33E-02	9.90E-03
Pulp Mill VOC	45,620	ODT/yr	proprionaldehyde	6.48E-4	lb/ODTP	NCASI 739 tbl 5-20	1.48E-02	3.40E-03
Pulp Mill VOC	45,620	ODT/yr	toluene	4.91E-2	lb/ODTP	NCASI 739 tbl 5-20	1.12E+00	2.56E-01
Pulping Area sub-total			**HAPs-VOC's**				**2.63**	**0.60**
Headbox Area	48,160	ADT/yr	acetaldehyde	1.01E-2	lb/ADTFP	NCASI 740 tbl 5-15	2.43E-01	5.55E-02
Vacuum Systems	48,160	ADT/yr	acetaldehyde	4.18E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.01E-01	2.30E-02
Fan Pump Silo	48,160	ADT/yr	acetaldehyde	3.40E-4	lb/ADTFP	NCASI 740 tbl 5-41	8.20E-03	1.90E-03

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	acetaldehyde	1.03E-2	lb/ADTFP	NCASI 740 tbl 5-42	2.48E-01	5.66E-02
Headbox Area	48,160	ADT/yr	biphenyl	1.80E-2	lb/ADTFP	NCASI 740 tbl 5-41	4.33E-01	9.89E-02
Vacuum Systems	48,160	ADT/yr	biphenyl	1.80E-3	lb/ADTFP	NCASI 740 tbl 5-41	4.33E-02	9.90E-03
Yankee Dryer (Stack #' 2-3)	48,160	ADT/yr	biphenyl	7.80E-2	lb/ADTFP	NCASI 740 tbl 5-42	1.88E+00	4.29E-01
Headbox Area	48,160	ADT/yr	carbon disulfide	2.09E-2	lb/ADTFP	NCASI 740 tbl 5-15	5.03E-01	1.15E-01
Vacuum Systems	48,160	ADT/yr	carbon disulfide	5.71E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.38E-01	3.14E-02
Fan Pump Silo	48,160	ADT/yr	chloroform	7.40E-4	lb/ADTFP	NCASI 740 tbl 5-41	1.78E-02	4.10E-03
Vacuum Systems	48,160	ADT/yr	chloroform	1.90E-3	lb/ADTFP	NCASI 740 tbl 5-41	4.58E-02	1.05E-02
Yankee Dryer (Stack #' 2-3)	48,160	ADT/yr	cumene	4.30E-3	lb/ADTFP	NCASI 740 tbl 5-16	1.04E-01	2.36E-02
Headbox Area	48,160	ADT/yr	formaldehyde	2.07E-4	lb/ADTFP	NCASI 740 tbl 5-15	5.00E-03	1.10E-03
Vacuum Systems	48,160	ADT/yr	formaldehyde	7.60E-6	lb/ADTFP	NCASI 740 tbl 5-15	2.00E-04	0.00E+00
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	formaldehyde	1.10E-2	lb/ADTFP	NCASI 740 tbl 5-16	2.65E-01	6.05E-02
Fan Pump Silo	48,160	ADT/yr	formaldehyde	3.30E-6	lb/ADTFP	NCASI 740 tbl 5-41	8.00E-05	2.00E-05
Headbox Area	48,160	ADT/yr	methanol	1.51E-2	lb/ADTFP	NCASI 740 tbl 5-15	3.64E-01	8.30E-02
Vacuum Systems	48,160	ADT/yr	methanol	4.28E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.03E-01	2.35E-02
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	methanol	5.50E-2	lb/ADTFP	NCASI 740 tbl 5-16	1.32E+00	3.02E-01
Fan Pump Silo	48,160	ADT/yr	methanol	8.90E-4	lb/ADTFP	NCASI 740 tbl 5-41	2.14E-02	4.90E-03
Vacuum Systems	48,160	ADT/yr	methyl ethyl ketone (MEK)	9.40E-6	lb/ADTFP	NCASI 740 tbl 5-15	2.00E-04	0.00E+00
Fan Pump Silo	48,160	ADT/yr	methyl ethyl ketone (MEK)	7.90E-5	lb/ADTFP	NCASI 740 tbl 5-41	1.90E-03	4.00E-04
Headbox Area	48,160	ADT/yr	methylene chloride	1.10E-3	lb/ADTFP	NCASI 740 tbl 5-41	2.65E-02	6.10E-03
Vacuum Systems	48,160	ADT/yr	naphthalene	3.60E-5	lb/ADTFP	NCASI 740 tbl 5-15	9.00E-04	2.00E-04
Yankee Dryer (Stack #'s 2-3)	48,160	ADT/yr	naphthalene	3.70E-2	lb/ADTFP	NCASI 740 tbl 5-16	8.91E-01	2.03E-01
Headbox Area	48,160	ADT/yr	phenol	2.10E-2	lb/ADTFP	NCASI 740 tbl 5-41	5.06E-01	1.16E-01
Headbox Area	48,160	ADT/yr	propionaldehyde	1.47E-3	lb/ADTFP	NCASI 740 tbl 5-15	3.54E-02	8.10E-03
Vacuum Systems	48,160	ADT/yr	propionaldehyde	4.77E-4	lb/ADTFP	NCASI 740 tbl 5-15	1.15E-02	2.60E-03
Fan Pump Silo	48,160	ADT/yr	propionaldehyde	2.70E-5	lb/ADTFP	NCASI 740 tbl 5-41	7.00E-04	2.00E-04
Headbox Area	48,160	ADT/yr	toluene	5.53E-3	lb/ADTFP	NCASI 740 tbl 5-15	1.33E-01	3.04E-02
Fan Pump Silo	48,160	ADT/yr	toluene	9.20E-4	lb/ADTFP	NCASI 740 tbl 5-41	2.22E-02	5.10E-03
Vacuum Systems	48,160	ADT/yr	toluene	1.70E-3	lb/ADTFP	NCASI 740 tbl 5-41	4.09E-02	9.30E-03
Paper Machine Area sub-total			**HAPs-VOC's**				**7.52**	**1.72**

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
						Page 15 of 17 TSD, Appdx A		
Boiler (Stack # 1)	636.852	MMCF/yr	lead (Pb) compounds	5.00E-4	lb/MMCF	AP-42 Table 1.4-2	1.59E-4	3.64E-5
Space heaters	14.673	MMCF/yr	lead (Pb) compounds	5.00E-4	lb/MMCF	AP-42 Table 1.4-2	3.67E-6	8.38E-7
Boiler (Stack # 1)	636.852	MMCF/yr	benzene	2.10E-3	lb/MMCF	AP-42 Table 1.4-3	6.69E-4	1.53E-4
Space heaters	14.673	MMCF/yr	benzene	2.10E-3	lb/MMCF	AP-42 Table 1.4-3	1.54E-5	3.52E-6
Boiler (Stack # 1)	636.852	MMCF/yr	dichlorobenzene	1.20E-3	lb/MMCF	AP-42 Table 1.4-3	3.82E-4	8.72E-5
Space heaters	14.673	MMCF/yr	dichlorobenzene	1.20E-3	lb/MMCF	AP-42 Table 1.4-3	8.80E-6	2.01E-6
Boiler (Stack # 1)	636.852	MMCF/yr	formaldehyde	7.50E-2	lb/MMCF	AP-42 Table 1.4-3	2.39E-2	5.45E-3
Space heaters	14.673	MMCF/yr	formaldehyde	7.50E-2	lb/MMCF	AP-42 Table 1.4-3	5.50E-4	1.26E-4
Boiler (Stack # 1)	636.852	MMCF/yr	napthalene	6.10E-4	lb/MMCF	AP-42 Table 1.4-3	1.94E-4	4.43E-5
Space heaters	14.673	MMCF/yr	napthalene	6.10E-4	lb/MMCF	AP-42 Table 1.4-3	4.48E-6	1.02E-6
Boiler (Stack # 1)	636.852	MMCF/yr	toluene	3.40E-3	lb/MMCF	AP-42 Table 1.4-3	1.08E-3	2.47E-4
Space heaters	14.673	MMCF/yr	toluene	3.40E-3	lb/MMCF	AP-42 Table 1.4-3	2.49E-5	5.70E-6
Boiler (Stack # 1)	636.852	MMCF/yr	arsenic	2.00E-4	lb/MMCF	AP-42 Table 1.4-4	6.37E-5	1.45E-5
Space heaters	14.673	MMCF/yr	arsenic	2.00E-4	lb/MMCF	AP-42 Table 1.4-4	1.47E-6	3.35E-7
Boiler (Stack # 1)	636.852	MMCF/yr	cadmium	1.10E-3	lb/MMCF	AP-42 Table 1.4-4	3.50E-4	8.00E-5
Space heaters	14.673	MMCF/yr	cadmium	1.10E-3	lb/MMCF	AP-42 Table 1.4-4	8.07E-6	1.84E-6
Boiler (Stack # 1)	636.852	MMCF/yr	chromium	1.40E-3	lb/MMCF	AP-42 Table 1.4-4	4.46E-4	1.02E-4
Space heaters	14.673	MMCF/yr	chromium	1.40E-3	lb/MMCF	AP-42 Table 1.4-4	1.03E-5	2.35E-6
Boiler (Stack # 1)	636.852	MMCF/yr	cobalt	8.40E-5	lb/MMCF	AP-42 Table 1.4-4	2.67E-5	6.11E-6
Space heaters	14.673	MMCF/yr	cobalt	8.40E-5	lb/MMCF	AP-42 Table 1.4-4	6.16E-7	1.41E-7
Boiler (Stack # 1)	636.852	MMCF/yr	manganese	3.80E-4	lb/MMCF	AP-42 Table 1.4-4	1.21E-4	2.76E-5
Space heaters	14.673	MMCF/yr	manganese	3.80E-4	lb/MMCF	AP-42 Table 1.4-4	2.79E-6	6.37E-7
Boiler (Stack # 1)	636.852	MMCF/yr	mercury	2.60E-4	lb/MMCF	AP-42 Table 1.4-4	8.28E-5	1.89E-5
Space heaters	14.673	MMCF/yr	mercury	2.60E-4	lb/MMCF	AP-42 Table 1.4-4	1.91E-6	4.36E-7
Boiler (Stack # 1)	636.852	MMCF/yr	nickel	2.10E-3	lb/MMCF	AP-42 Table 1.4-4	6.69E-4	1.53E-4
Space heaters	14.673	MMCF/yr	nickel	2.10E-3	lb/MMCF	AP-42 Table 1.4-4	1.54E-5	3.52E-6

TABLE 4
SCA TISSUE NORTH AMERICA LLC
GARY, IN MILL
POTENTIAL-TO-EMIT EMISSION CALCULATIONS FOR HAP's

Note: PTE usages based on maximum rated production capacity of the plant at 8760 hr/yr = 45,625 MDT/yr

	PTE Usage	Units	Pollutant	Emission Factor	Units	Emission Factor Reference	PTE (tpy)	PTE (lb/hr)
Boiler HAP VOC's							**2.62E-2**	**5.98E-3**
Boiler HAP metals							**1.92E-3**	**4.38E-4**
Boiler HAP totals							**2.81E-2**	**6.42E-3**
Space heaters HAP VOC's							**6.04E-4**	**1.38E-4**
Space heaters HAP metals							**4.42E-5**	**1.01E-5**
Space heaters HAP totals							**6.48E-4**	**1.48E-4**
Electric Arc Welding	6	electrode/hr 10 hr/yr	Lead	1.62E-1	lb/M lb	AP-42 Table 12.19-1	**4.86E-6**	**9.72E-4**
facility totals			methylene chloride				6.62E-02	1.52E-02
facility totals			acetaldehyde				7.09E-01	1.62E-01
facility totals			arsenic				6.52E-05	1.49E-05
facility totals			benzene				6.84E-04	1.86E+02
facility totals			biphenyl				2.36E+00	5.40E-01
facility totals			cadmium				3.58E-04	8.18E-05
facility totals			carbon disulfide				7.16E-01	1.64E-01
facility totals			chloroform				1.96E-01	4.49E-02
facility totals			chromium				4.56E-04	1.04E-04
facility totals			cobalt				2.74E-05	6.25E-06
facility totals			cumene				1.04E-01	2.36E-02
facility totals			dichlorobenzene				3.91E-04	8.93E-05
facility totals			formaldehyde				2.98E-01	6.79E-02
facility totals			lead (Pb) compounds				1.68E-04	1.01E-03
facility totals			manganese				1.24E-04	2.83E-05
facility totals			mercury				8.47E-05	1.93E-05
facility totals			methanol				2.84E+00	6.49E-01
facility totals			methyl ethyl ketone (MEK)				5.05E-02	1.15E-02
facility totals			naphthalene				8.94E-01	2.04E-01
facility totals			nickel				6.84E-04	1.56E-04
facility totals			phenol				5.49E-01	1.25E-01
facility totals			proprionaldehyde				6.24E-02	3.60E-03
facility totals			toluene				1.32E+00	3.01E-01
Facility Totals			**HAPs**			**Totals:**	**1.02E+01**	**1.88E+02**
Facility Totals			**HAP's-VOC's**			**Totals:**	**9.45E+00**	**1.88E+02**
Facility Totals			**HAP's-metals**			**Totals:**	**1.97E-03**	**1.42E-03**

Note-carbon disulfide is a HAP, but it is not an organic compound or a metal